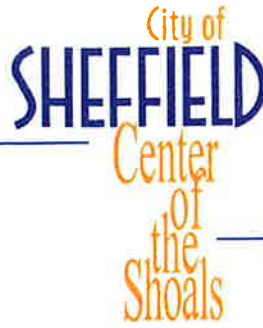


Steven R. Stanley
Mayor



City Council Members
Gary Highfield - District 1
Barbara S. Cook - District 2
Fred Mason - District 3
CaSheta Rutland - District 4
Randa Hovater - District 5

September 12, 2022

Ms. LaToya Edwards
Recreation and Conservation Program Specialist
Alabama Department of Economic and Community Affairs
401 Adams Avenue
Montgomery, AL 36104
VIA EMAIL: Latoya.Edwards@adeca.alabama.gov

RECEIVED
SEP 12 2022
COMMUNITYSVCS 11:54am

RE: City of Sheffield, Alabama
RTP Application – Trail of Tears National Historic Trail at Tuscumbia Landing

Dear Ms. Edwards:

Please find enclosed the City of Sheffield's Recreational Trails Program Application for the Trail of Tears National Historic Trail at Tuscumbia Landing.

The City of Sheffield has developed long-standing partnerships to arrive at this request for funding to construct trail access to our nation's history. Federal, state and local partners have aligned to support this, now shovel ready project, since 2008 to develop a master plan worthy to honor the history of the Trail of Tears and its National Historic Registry.

The primary partnerships since the genesis include National Trail of Tears Association, National Park Service, Tennessee Valley Authority, USDA, Federal Highway Administration and Tribal support from numerous groups including the Chickasaw Nation, the Cherokee Nation, the Muskogee Nation, and the Poarch Band of Creek Indians. The Alabama Historical Commission, Alabama Department of Transportation, Muscle Shoals National Heritage Area, University of North Alabama, Northwest Shoals Community College, the Singing River Trail, and many other champions have supported the vision, planning and development of this nationally significant project.

We respectfully request a review of this application and consideration for funding.

Sincerely,

A handwritten signature in blue ink that reads "Steven R. Stanley".
Mayor Steve Stanley

cc Kelley Taft, The Kelley Group

Attachments – 2023 RTP Application

ADECA

KAY IVEY
GOVERNOR

KENNETH W. BOSWELL
DIRECTOR

RECREATIONAL TRAILS PROGRAM FY 2023 FUNDING CYCLE

GRANT APPLICATION DOCUMENT

SUBMISSION DEADLINE:
12 NOON, MONDAY, SEPTEMBER 12, 2022

401 Adams Avenue | Post Office Box 5690
Montgomery, Alabama 36104 | 36103-5690

July 2022

State Administering Agency

Alabama Department of Economic and Community Affairs (ADECA)

Recreational Trails Program

The Recreational Trails Program (RTP) was created in 1998 to assist organizations in acquiring, developing, and/or improving trail and trail-related resources. Eligible applicants include federal and state agencies and local units of government.

Matching Requirement

The federal share for the RTP is up to 80% of the total eligible project costs. The non-federal share may come from state, local, or private sources. Other federal grant funds cannot be included as match unless allowed by specific legislation.

A federal agency project sponsor may contribute appropriated funds toward a RTP project up to the point at which the total federal share reaches 95 percent of the total project cost. This limitation is intended to ensure commitment to the project from state, local, or private co-sponsors.

Submission Instructions

Please submit one copy of your application. Maps must be no larger than 11"x17" in size.

Applications should be submitted:

By Mail:

Alabama Department of Economic and Community Affairs
Attn: LaToya Edwards, Recreation and Conservation Programs Specialist
Post Office Box 5690
Montgomery, Alabama 36103-5690

By Courier:

Alabama Department of Economic and Community Affairs
Attn: LaToya Edwards, Recreation and Conservation Programs Specialist
401 Adams Avenue, Suite 524
Montgomery, Alabama 36104

By Email:

latoya.edwards@adeca.alabama.gov and crystal.talley@adeca.alabama.gov

Please note that whichever method of submission is used, the application **must be received** by the Community and Economic Development Division no later than **12:00 Noon on Monday, September 12, 2022**.

Application Procedures

The application consists of the items listed on the application checklist. In addition, the project application must include the following support documentation, if applicable:

- If the applicant and the landowner are not the same, a signed statement from affected landowners stipulating full support of the proposed use of their land and their support for the project application. The statement must clearly indicate that he/she is willing to provide an easement or other legally binding agreement that ensures public access to the recreational trail improvements funded by the grant (23 U.S.C. Section 206(h)(4)(A) and (B)).
- If applicable, a signed statement that the project is in compliance with 23 U.S.C. Section 206(g)(4) of the RTP which prohibits the use of grant funds to upgrade, expand, or otherwise facilitate motorized use or access to recreational trails predominantly used by non-motorized recreational trail users and on which, as of May 1, 1991, motorized use was prohibited or had not occurred.
- If applicable, a signed statement by the federal agency that the construction of new trails crossing federal lands is in compliance with all applicable laws, including the Forest and Range-land Renewable Resources Planning Act and the Federal Land Policy and Management Act.
- If construction of any recreational trail on Bureau of Land Management or National Forest System lands for motorized uses is proposed, a signed statement certifying that the lands have been allocated for uses other than wilderness in the approved agency resources management plan or have been released to uses other than wilderness by an Act of Congress, and such construction is otherwise consistent with the management direction in such approved land and resources management plan.
- If applicable, documentation of compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Special Procedures for Projects that Require Permits or Other Approvals

- Crossing of Public Roads - Project applicants must include a statement or copies of letters certifying that the appropriate officials having jurisdiction over the public road to be crossed have reviewed the project and that the proposed crossing meets their approval. For state road crossings, contact the appropriate Alabama Department of Transportation District Office. For all other classified roads, contact the street or highway department of the jurisdiction.
- Railroad, Gas Line, Power Line, and Other Utility Rights-of-Way - Project applicants must include documentation indicating that appropriate officials from the railroad

company and/or utility company have reviewed the project and that the proposed crossing meets their approval.

- **Water Obstruction and Encroachment Permit (including wetlands)** - Project applicants planning to construct, operate, maintain, enlarge, or abandon any obstruction (bridge, channel change, etc.) that will affect a watercourse; its 100-year floodway; or any lake, pond, reservoir, swamp, marsh, or wetland must contact ADECA or the applicable federal agency. Examples of work requiring a permit include changing a stream channel; dredging for crossings; building or modifying a bridge, dock, culvert, or pier; installing or changing an intake or outfall structure; working on bank protection, including fill, levees, dikes, bulkheads, and flood walls; or placing an aerial crossing, such as a power line, over a navigable stream. Any state or local government agency or public utility working in a 100-year flood plain, which has been identified by the National Flood Insurance Program, must also consult with ADECA before proceeding with its application.
- **Erosion and Sedimentation Control Plan** - Project applicants may be required to prepare an erosion and sedimentation control plan for stream crossings or general construction activities. Therefore, project applicants must notify the appropriate County Soil Conservation District Office of the project. The district office will advise the applicant accordingly.
- **Building Permits** - Follow existing procedures for compliance with local building codes.
- **Health Department Permits**

Project Site Property Requirements

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, 42 U.S.C. 4601 et seq. (Uniform Act) provides important protections and assistance for people affected by federally funded projects. The governmentwide regulation implementing the Uniform Act is title 49 CFR Part 24. The Surface Transportation and Uniform Relocation Assistance Act (STURAA) (Pub. L. 100-17) of 1987 designated the U.S. Department of Transportation (DOT) as the Federal Lead Agency for the Uniform Act. The DOT has delegated these responsibilities to the FHWA at 49 CFR 1.85(d)(7).

Public Employee and Equipment Costs

Work performed by project sponsor staff, whether administrative or construction, may not be paid with RTP funds. Project sponsor staff time (hourly rate of pay and FICA percentage only), or equipment usage as appropriate, may be counted as sponsor in-kind match when properly documented and included in the budget.

Maps

Project Location Map

The project location map must display the location of the project in relation to the city or county area and the surrounding highway/road network. This map must be sufficiently detailed so that state or federal officials who visit the site can do so without local assistance.

Preliminary Site Plan

The site plan should give a general layout of the park or area to be developed and include the following items:

- Proposed facilities and development included in the phase for which RTP assistance is being requested
- Existing facilities regardless of funding source
- Future development--if known
- Location of any existing power lines or other utilities within the site boundary area
- Location and measurements of any easements or rights-of-way
- Location of floodplain if applicable
- Site acreage to the nearest tenth of an acre
- Title block information including the title of the project, north arrow, scale, and date prepared

Maps and drawings must be clear and legible and no larger than 11"x17" in size.

Upon project completion, a final site map will be required for all RTP assisted projects. The project sponsor should inform the architect/engineer of this requirement prior to entering into a contract.

Property or Project Boundary Area Map

An application must include a boundary map which delineates the legal boundaries of the property to be developed. A boundary map must contain the following information:

- Project title
- Date of map preparation
- Signature of the person that prepared the map and the signature of the applicant
- Known outstanding rights and interests that are held by others such as easements, deed/lease restrictions, reversionary interest, i.e., power lines that cross the site, rights-of-way, etc.
- Deed reference--book and page number
- Sufficient detail so as to legally identify the land:
 - adjoining water bodies or other natural landmarks
 - bearings and distances (required)

- identification of adjacent streets, roads, and highways
 - north arrow
 - a scale stated in feet per inch
- Project sponsor name

Americans with Disabilities Act (ADA) Accessibility Guidelines

All projects are required to be planned/designed to comply with the "American Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped".

ADA Accessibility Guidelines (**ADAAG**) can be found at <https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/ada-standards/chapter-10-recreation-facilities>. The Architectural Barriers Act (ABA) Accessibility Guidelines (**ABAAG**) for Recreation Facilities can be found at <https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-aba-standards/aba-standards>. The following questions and answers cover the highlights of the trail guidelines:

First, what exactly is a trail according to ADA regulations?

A trail is "a route that is designed, designated, or constructed for recreational pedestrian use or provided as a pedestrian alternative to vehicular routes within a transportation system."

What kinds of trails are subject to the ADA accessibility guidelines?

The accessibility guidelines apply to those trails which are designed and constructed for pedestrian use. These guidelines are not applicable to trails primarily designed and constructed for recreational use by equestrians, mountain bicyclists, snowmobile users, or off-highway vehicle users, even if pedestrians may occasionally use the same trails. However, a multi-use trail specifically designed and designated for hiking and bicycling would be considered a pedestrian trail.

Does that mean an urban bikeway is a "pedestrian trail"?

Accessibility guidelines apply to trails used as non-motorized transportation facilities for bicyclists and skaters as well as pedestrians. However, the AASHTO Guide (2012), requires a greater level of accessibility than the ADA trail guidelines. The AASHTO Guide for the Development of Bicycle Facilities is the primary guidebook for facilities built with transportation funds. The Guide (available at https://nacto.org/wp-content/uploads/2015/04/AASHTO_Bicycle-Facilities-Guide_2012-toc.pdf) generally provides a greater level of accessibility than the ADA trail guidelines.

Will we have to bring existing trails up to ADA standards?

No; the proposed guidelines require all areas of newly designed or newly constructed and altered portions of existing trails to comply. However, for entities covered by Title II of ADA, "program accessibility," may require accessibility to be provided on existing trails. "Program

accessibility” generally means that the major elements in a recreation program need to be accessible.

Must we improve accessibility when trail maintenance is done?

Routine or periodic maintenance or repair of existing trails or trail segments is exempt. Maintenance and repair is defined as work that is not an alteration: it does not change the original purpose, intent, or design of the trail.

Can we be required to allow vehicles on our non-motorized trails to accommodate accessibility?

No; while a variety of mobility-enhancing equipment can be used on trails, the necessity of protecting the environment and maintaining the appropriateness of the setting might exclude ATVs or other off-highway vehicles.

Does an accessible trail have to be paved?

No; as long as the surface is “firm and stable”.

What about new trails that are nowhere near a road or an accessible trailhead?

The requirements apply only to trails that “connect to an accessible trail” or “designated trailhead”. Where new trails connect to an existing trail that is not accessible, the technical provisions do not apply. Nor do they apply where the new or altered portion is not connected to a designated trailhead.

What if building a trail to an accessible standard just isn’t logical, or desirable, or even possible?

Departures from the guidelines are permitted for any portion of the trail where compliance would:

- cause substantial harm to cultural, historic, religious, or significant natural features or characteristics
- substantially alter the nature of the setting or the purpose
- require construction methods or materials that are prohibited by Federal, State, or local regulations or statutes
- not be feasible due to terrain or the prevailing construction practices

For a summary of accessibility standards for Federal outdoor developed areas, please visit: <https://www.access-board.gov/files/aba/guides/outdoor/outdoor-guide.pdf>.

Guidance to help project sponsors meet RTP requirements and provide best practices for trail accessibility and trail design, construction, and maintenance can be found at https://www.fhwa.dot.gov/environment/recreational_trails/guidance/accessibility_guidance/.

Thresholds

Prospective applicants are not eligible to apply if the entity:

- has an open Land and Water Conservation Fund (LWCF) or RTP grant as of September 12, 2022;
- has unresolved compliance issues from a previous LWCF or RTP grant;
- did not respond in writing to an LWCF or RTP inspection report that contained deficiencies; or
- has not developed and received approval of a Corrective Action Plan addressing the correction of previous compliance issues.

APPLICATION CHECKLIST

Please use this checklist to ensure all required application documents are included prior to submitting to ADECA. **Incomplete applications will not be processed.**

Letter on entity letterhead signed by the Chief Elected Official	X
Application Cover Sheet (Page 9)	X
Resolution adopted by the applicant authorizing the submission of the application and committing all matching funds required to complete the proposed project	X
A narrative description of the proposed project and responses to each of the application rating criterion (Pages 10-13)	X
Project Cost Estimate (Page 14)	X
Detailed project budget with descriptive narrative	X
Schedule of project activities necessary for project completion to include measurable milestones (18-month period beginning March 2022)	X
Preliminary site plan	X
Location/vicinity map	X
Property boundary area map	X
Verification of SAM.gov registration	X
Environmental Assessment:	X
Concurrence from the U.S. Army Corps of Engineers	X
Concurrence from the U.S. Fish and Wildlife Service	X
Concurrence from the Alabama Historical Commission	X
Approval to cross a public highway or a public utility right-of-way (if applicable)	
Water obstruction & encroachment permit (if applicable)	
Hazardous materials survey if real property is to be acquired with grant funds	
Environmental Assessment (if applicable)	
Copy of deed to property, plat, and/or legal description of the property proposed for purchase and/or development	X
NOTE: If real property is to be acquired with grant funds, the acquisition must comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (The Uniform Act). Implementation regulations for The Uniform Act are found in 49 CFR Part 24. You may not acquire property through donation or purchase until after the grant agreement has been executed and consultation with ADECA staff has occurred.	
Signed statement from landowner expressing support (This is applicable if the applicant and landowner are not the same. A recorded easement allowing trail construction will be required from the landowner before construction begins.)	N/A
Environmental Screening Form and Environmental Checklist (Pages 15-19)	X
Letters of endorsement, support, and commitment; other documentation of citizen participation and public comment period	X

You must include a copy of this completed checklist with your application. Please see the following website for electronic versions of the forms:
<https://adeca.alabama.gov/trails/rtp-information-and-application-documents/>.

Application Cover Sheet

Applicant's Name (Organization):	<u>City of Sheffield</u>
Address:	<u>PO Box 380</u>
	<u>Sheffield</u>
	<u>Alabama</u>
	<u>ZIP+4: 35660</u>
County:	<u>Colbert</u>
FEI Number:	<u>63-6001364</u>
DUNS Number:	<u>075459230</u>
Unique Entity Identifier (UEI):	<u></u>
Project Title:	<u>Trail of Tears National Historic Trail at Tuscumbia Landing</u>
Project Description:	<u>The purpose of this application is to create a diverse use trail at the</u>
	<u>Tuscumbia Landing National Historic Site which is part of the U.S.</u>
	<u>National Park's Trail of Tears National Historic Trail System.</u>
Park Name, if applicable:	<u>Trail of Tears National Historic Trail</u>
Park (project location) Address:	<u>Park West (Blackwell Road / Fontana Street)</u>
	<u></u>
	<u>ZIP+4: 35660</u>
Latitude and Longitude (deg/min/sec):	<u>34° 44' 55.3056" N 87° 43' 34.464" W</u>
Congressional District (for project location):	<u>4</u>
State Senate District (for project location):	<u>1</u>
State House District (for project location):	<u>3</u>
Applicant Contact Person and Title:	<u>Steve Stanley, Mayor</u>
Phone Number:	<u>256-383-0250</u>
Email Address:	<u>mayor@sheffieldalabama.org</u>
Grant Administrator or Other Contact, Title, and Organization:	<u>Kelley Taft, MPA, The Kelley Group</u>
Phone Number:	<u>256-248-7030</u>
Email Address:	<u>kelley@kelleynetwork.com</u>

Project Descriptive Narrative

Provide a brief, yet informative, description of the proposed project and address each evaluation criterion on the following pages (provide additional information and documentation as may be needed to support your response to each evaluation criterion).

Project Information

Name of Project: Trail of Tears National Historic Trail at Tuscumbia Landing

Trail Length in Linear Feet (L.F.): 3755 LF Trail Width: 8' trail, 10' boardwalk

Trail Surface Type: Natural, aggregate and timber boardwalk

Application Type: ☐ Non-motorized for a Single Use ☐ Motorized
☒ Non-motorized for Diverse Use ☐ Educational

Type of Applicant: ☒ City/Town ☐ County
☐ State ☐ Other

Total Estimated Project Cost	\$ <u>348,393.76</u>
Grant Amount Requested	\$ <u>278,715.01</u>
Total Local Match	\$ <u>69,678.75</u>
Cash Match	\$ <u>69,678.75</u>
In-Kind Match	\$ <u>0</u>
Donation	\$ <u>0</u>

Brief Description of the Project:

The purpose of this application is to create a diverse use trail at the Tuscumbia Landing National Historic Site which is part of the U.S. National Park's Trail of Tears National Historic Trail system.

Please address all evaluation criteria (100 Total Available Points). [See attached.](#)

- 1. Describe the degree to which the project's scope and feasibility meet the project area's recreational needs. (Key Consideration: Does the project appear to be feasible and incorporate a good project design with consideration given to the natural and cultural environment in which the project is located and appropriate consideration given to identified needs and project benefits?) 10 Points Available**
- 2. Describe the ways in which the project provides for the greatest number of compatible recreational purposes. (Key Consideration: An important concern is that the project will enhance the quality and quantity of recreational trail opportunities available in the community or region. Points will be given to projects with connectivity to other trails and/or parks, environmental education and preservation, and economic development opportunities.) 10 Points Available**

- 3. Describe the ways in which the project provides a new, unique, or more effective means for making trail opportunities available to the public. (Key Consideration: This criterion includes projects of national, regional, and local demonstration value. The most important concern is whether the grant recipient is committed to trying an approach that is new at the local level. Additional points are awarded for nationwide applicability and statewide or regional value. The applicant must commit to documenting the results of the demonstration and identify the method to be used in documenting the results.) 10 Points Available**
- 4. Describe the ways in which the project facilitates the access and use of trails by persons with disabilities, older adults, economically disadvantaged, and other special populations or groups. (Key Consideration: Whether the project will expand recreation opportunities for special populations with recreation deficiencies.) 10 Points Available**
- 5. Describe the ways in which the project creates opportunities for new partnerships between trail users, private interest groups, and public agencies within the project area. (Key Consideration: The major concern is that the project is a component of an integrated effort to enhance economic revitalization and community conservation. Points will be given to applicants providing evidence of cooperative efforts with trail user groups and/or multiple public meetings.) 10 Points Available**
- 6. Describe the ways in which the project uses the grant funds to leverage other public or private investments (in the form of services and materials as well as dollars). (Key Consideration: The major concern is whether actual leveraging is assured or the potential for leveraging is good, outside of any funds committed for the initial grant match. Points will be given for applicants committing double the minimum local match or higher. Supporting documentation must be included in the application.) 10 Points Available**
- 7. Describe the degree of commitment to continue operation and maintenance of the project. Include an operation and maintenance plan detailing the amount of money needed to operate and maintain the trail/facility after project completion and identify who will be responsible for these activities. (Key Consideration: Whether the grant recipient is willing to commit to continue the maintenance and operation of the facilities and whether the applicant provides a realistic operation and maintenance plan/budget. Additional points will be awarded to applicants demonstrating innovative funding measures for trail maintenance.) 10 Points Available**
- 8. The degree to which community involvement is addressed: i.e., (A) Project idea originated with trail users or a community group that has substantial knowledge, and (B) The private sector (including individual citizens, community groups, and/or local business enterprises) has participated in the development of the proposed idea and has made commitments of labor, money, or materials to support project implementation. (Key Consideration: The objective is to determine if the project is responding to citizen-identified needs. The priority of the project to users is evidenced by citizen support for the idea. Points will be awarded to applicants demonstrating that the project concept was originally proposed at the grassroots level**

and, especially, for extensive citizen or private organization involvement in project development and support in project implementation as well as applicants demonstrating extensive involvement and participation from citizens and interest groups during all phases of application development and commitments beyond. Supporting documentation must be included in the application.) **10 Points Available**

9. Describe in detail how the trail will be managed. Include a discussion on season length, hours of operation, limitations on use, enforcement provisions, and scheduling. 10 Points Available

10. Identify and describe the service area of the project. Approximately how many people do you propose to serve with this project? Identify other trail resources in the service area by trail type (motorized, non-motorized, multi-use), distance, location in relation to the proposed trail, and ownership. (Key Consideration: The RTP was created to address trail needs in the urban and rural areas of the state. In order to assess the need for additional trails it is first necessary to identify the quantity and location of existing resources within the service area. It is also necessary to establish a service area – either population or resource based. For example, a population-based service area could be a neighborhood, school district, or political jurisdiction whereas, a resource-based service area might be defined along a linear greenway, water course, or unique natural/cultural area. However, in both instances, an estimate of the number of beneficiaries should be provided. Please identify how the project service area was determined.) 10 Points Available

NOTE: Property acquired with RTP funds must remain open to the public in perpetuity. Should the property cease to be open to the public for trail use, the applicant must repay the RTP 80% (or the federal percentage share) of the fair market value of the property at the time of the change in use. If the project is located on an easement or on leased land, the minimum timeframe for the easement or lease is 25 years. The project must remain open for public access for the use for which the RTP funds were intended during that time. For development projects on applicant owned property, the project must remain open for public access for the use for which the RTP funds were intended for a minimum of 25 years.

1. **Describe the degree to which the project's scope and feasibility meet the project area's recreational needs. (Key Consideration: Does the project appear to be feasible and incorporate a good project design with consideration given to the natural and cultural environment in which the project is located and appropriate consideration given to identified needs and project benefits?) 10 Points Available**

In order to establish the identified needs and project benefits as linked to the natural and cultural environment, one must first know the history of the Trail of Tears at Tuscumbia Landing, the location of the proposed trail.

The **Trail of Tears** was a series of forced displacements of approximately 125,000 Indigenous people of the "Five Civilized Tribes" between 1830 and 1850 by the United States government. This act was part of the Indian removal, the ethnic cleansing was gradual, occurring over a period of nearly two decades. Members of the so-called "Five Civilized Tribes"— the Cherokee, Muscogee (Creek), Seminole, Chickasaw, and Choctaw nations (including thousands of their black slaves) were forcibly removed from their ancestral homelands in the Southeastern United States to areas to the west of the Mississippi River that had been designated Indian Territory. The forced relocations were carried out by government authorities after the passage of the Indian Removal Act in 1830.

The 223 years of documented history for the Tuscumbia Landing site spans the time of Native American settlement through the ongoing history of Euro-American settlement. It is considered one of the most significant sites in Alabama and perhaps the southeastern United States. Tuscumbia Landing is a unique site that played an important historical role during several time periods in American history, and it is listed on the National Register of Historic Places (#82002002). The site has garnered national attention because of its pivotal role during the Trail of Tears. Tuscumbia Landing was designated by the National Park Service as a certified historic site on the Trail of Tears National Historic Trail in April 2007. Tuscumbia Landing is certified by the National Park Service as part of the Trail of Tears National Historic Trails System due to its involvement with the Cherokee and Creek Indian removal. Two modes of transportation (the wagon road and the Tuscumbia, Courtland, and Decatur Rail-Road) were used for Cherokee and Creek travel to the landing, where they caught steamboats to continue their removal to Indian Territory.

This natural and cultural environment has been assessed by Alabama Department of Transportation [Project No.STPTE-TE08(906)] beginning in 2011 in partnership with Federal Highway Administration, National Park Service, Tennessee Valley Authority, Tribal including the Chickasaw Nation, the Cherokee Nation, the Muskogee Nation, and the Poarch Band of Creek Indians, Alabama Historical Commission and Muscle Shoals National Heritage Area. These partners have performed onsite surveys, studies, environmental reports and cultural resource assessments.

The "shovel ready" design plans completed in 2021 by ALTA Planning were methodically prepared after the review of volumes of reports and onsite meetings with National Park Service, Tennessee Valley Authority, Tribal and Alabama Historical Commission. The consultations and reports **identified the need** to protect specific areas of the Landing by

routing the proposed trail adjacent to the original trail to preserve and protect the archeological sites. The **project benefits** include an onsite archeological consultant during construction of the trail to give hands on direction to ensure all artifacts are identified, cataloged and preserved. The areas identified as potential artifacts/archeological sites in the previous studies will be left in natural state.

Economic Development

For Colbert County, tourism is one of the primary economic factors. The area depends on recreational and eco-based tourism related to the Tennessee River to survive. Per the Alabama Department of Tourism, Colbert County's travel-related expenditures increased by 42% from 2019 to 2021. Tourists are visiting Colbert County for outdoor recreational activities. This increase is due to the desire to be outdoors during the Covid-19 pandemic.

Travel Related Earnings by County Total (Direct and Indirect)

2019-2021 Growth

Colbert County 42% increase (2019 \$24,578,803; 2021 \$35,572,204)

Alabama Department of Tourism 2021 Tourism Economic Report

These numbers are indicative of the need for additional outdoor recreational activities. The Tuscumbia Landing Trail will allow Sheffield the opportunity to promote the community's history of the state and national level for economic growth and development.

- 2. Describe the ways in which the project provides for the greatest number of compatible recreational purposes. (Key Consideration: An important concern is that the project will enhance the quality and quantity of recreational trail opportunities available in the community or region. Points will be given to projects with connectivity to other trails and/or parks, environmental education and preservation, and economic development opportunities.) 10 Points Available**

This application supports Phase I, Tuscumbia Landing, of the Master Plan. The Master Plan is compiled of three phases of construction to support the history of the Trail of Tears.

The Tuscumbia Landing Trail will connect to Inspiration Landing and Park West, as well as future phases of the Trail of Tears Historic Trail - Phase II Park West and Phase III Blackwell Road (see attached master plan, engineering plans and cost estimates).

Connectivity to Inspiration Landing

Set in the center of the Shoals on over 300 acres, Inspiration Landing will be a mixed-use development on the banks of the Tennessee River in Sheffield, Alabama. Furnace Hill, an entertainment district planned within the Inspiration Landing community, will bring together some of the region's most celebrated brands to create a hub of dining, shopping, family entertainment and nightlife. There's no place else quite like it – a vibrant blend of music, heritage and hospitality that reflects the Shoals area, birthplace of some of the greatest R&B, rock and pop hits ever recorded.

The Tuscumbia Landing Trail will connect to Inspiration Landing via new sidewalks constructed, as well as new access roads, both constructed in 2021.

Economic development is supported by tourism through the Alabama Trail of Tears Association, Alabama Mountain Lakes Tourist Association, Muscle Shoals National Heritage Area and Colbert County Tourism. These four agencies work together to support the Trail of Tears attractions in north Alabama, including the Annual Trail of Tears Motorcycle Ride began in 1994 to honor the memory of the Cherokees, Creeks, and other Native Americans who were forced to march west to Indian Territory (now Oklahoma) during the 1830s. The event begins in Chattanooga, Tennessee, and ends in Waterloo, Lauderdale County, and in recent years has drawn more than 150,000 riders.

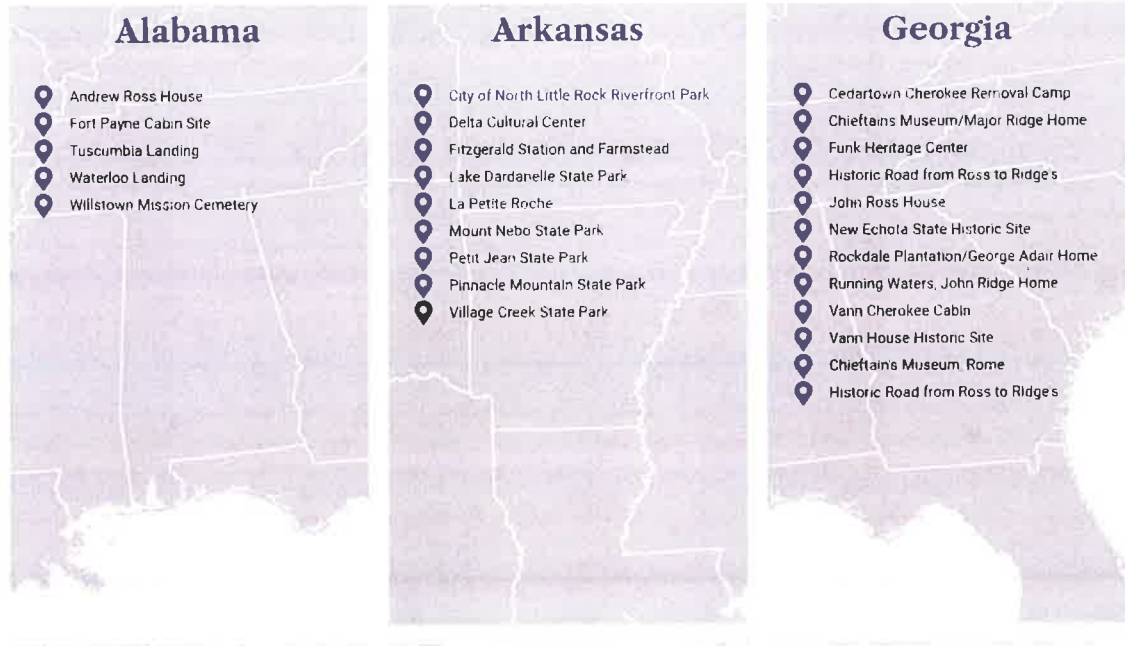
Today, the Trail of Tears National Historic Trail includes more than 5,000 miles of trail across nine states (N.C., Ga., Tenn., Ill., Mo., Ala., Ky., Ark. and Okla.) and has an economic impact of over 1 billion dollars.

- 3. Describe the ways in which the project provides a new, unique, or more effective means for making trail opportunities available to the public. (Key Consideration: This criterion includes projects of national, regional, and local demonstration value. The most important concern is whether the grant recipient is committed to trying an approach that is new at the local level. Additional points are awarded for nationwide applicability and statewide or regional value. The applicant must commit to documenting the results of the demonstration and identify the method to be used in documenting the results.) 10 Points Available**

The City of Sheffield envisions the Tuscumbia Landing Trail to solidify its place at the national recreational level. The Trail of Tears National Historic Trail spans nine states and supports an economic impact of over 1 billion dollars annually. The city is committed to ensuring the trail is a success and Phase II and Phase III are implemented in the future.

Sheffield has formed an alliance with NPS for longevity and sustainability to ensure the site is marketed nationally by NPS. The National Park Service (NPS) works with federal agencies, state and local governments, organizations, tribes, and private individuals to administer the Trail of Tears National Historic Trail. Partners provide opportunities for visitors to experience the trail, to discover its story and significance, and they protect and preserve trail resources. The following is an excerpt from NPS website and the Trail of Tears Association. Tuscumbia Landing is listed as a certified site and the implementation of the trail with RTP funds will enable Sheffield to officially offer access to the historic site.

Certified Sites



Once implementation of the trail occurs, the city plans to engage a service provider to track visitors through their cell phones when they visit Tuscumbia Landing. The cell phone access is based on location services emitted by the cell phone and pinpoints the trail users home location. This data will reveal where the visitor is from, and thereby allows Sheffield to determine if the visitor(s) are local, out of state or international.

4. Describe the ways in which the project facilitates the access and use of trails by persons with disabilities, older adults, economically disadvantaged, and other special populations or groups. (Key Consideration: Whether the project will expand recreation opportunities for special populations with recreation deficiencies.) **10 Points Available**

The project facilitates access for persons with disabilities. As required by NPS, the trail construction plans meet or exceed the requirements of ADA. Compacted aggregate and timber boardwalk will be used in the areas where ADA compliance cannot be achieved with natural ground. The project will expand recreational opportunities for individuals with disabilities by providing access to the Tuscumbia Landing overlook on the Tennessee River via the new ADA compliant trail. The overlook was the location where Native Americans were placed on the steamboats for transportation to the west. This overlook is scenic, and the new trail provides access which would not otherwise be achievable to persons with physical disabilities.

- 5. Describe the ways in which the project creates opportunities for new partnerships between trail users, private interest groups, and public agencies within the project area. (Key Consideration: The major concern is that the project is a component of an integrated effort to enhance economic revitalization and community conservation. Points will be given to applicants providing evidence of cooperative efforts with trail user groups and/or multiple public meetings.) 10 Points Available**

Due to the efforts of the National Park Service, Native American tribal nations, the City of Sheffield, and other groups, Tuscumbia Landing is being redeveloped as an interpretive site along the Trail of Tears. The trail follows the original line of the Tuscumbia, Courtland, & Decatur Railroad and ends with an overlook where Spring Creek and the Tennessee River meet. On the waterline below the overlook are the remains of the jetty, on which both people and trade goods were transferred from rail to boat. Atop the bluff, is the site of the original depot, where an overlook boardwalk will soon stand.

The primary partnerships since the genesis include National Trail of Tears Association, Federal Highway Administration, National Park Service, Tennessee Valley Authority, and Tribal support from numerous groups including the Chickasaw Nation, the Cherokee Nation, the Muskogee Nation, and the Poarch Band of Creek Indians. The Alabama Historical Commission, Alabama Department of Transportation, Muscle Shoals National Heritage Area, University of North Alabama, Northwest Shoals Community College, as well as many other champions have supported the vision.

- 6. Describe the ways in which the project uses the grant funds to leverage other public or private investments (in the form of services and materials as well as dollars). (Key Consideration: The major concern is whether actual leveraging is assured or the potential for leveraging is good, outside of any funds committed for the initial grant match. Points will be given for applicants committing double the minimum local match or higher. Supporting documentation must be included in the application.) 10 Points Available**

The City of Sheffield is supporting this project with a twenty percent cash match. However, it is important to highlight the recent partnerships, expenditures, and construction to make this project “shovel ready” in the last three years. Phase I Tuscumbia Landing includes: NEPA study, new access road with sidewalks, parking lot and trail.

The city partnered with Muscle Shoals National Heritage Area to commission a 55-acre environmental study (NEPA) of Tuscumbia Landing (see AST Study attached). The city paid 50% of total cost of \$18,075.00 for the study.

The city partnered with National Park Service to pay 50% of engineering design plans for Tuscumbia Landing Phase I in the amount of \$40,000 to ensure the RTP grant application had “shovel ready” design plans. Project was completed in 2021.

The city partnered with USDA to secure a loan to build an access road, sidewalks and parking lot for Tuscumbia Landing in the amount of \$1,000,000. Project was completed in 2021.

The RTP grant will complete Phase I Tuscumbia Landing trail.

- 7. Describe the degree of commitment to continue operation and maintenance of the project. Include an operation and maintenance plan detailing the amount of money needed to operate and maintain the trail/facility after project completion and identify who will be responsible for these activities. (Key Consideration: Whether the grant recipient is willing to commit to continue the maintenance and operation of the facilities and whether the applicant provides a realistic operation and maintenance plan/budget. Additional points will be awarded to applicants demonstrating innovative funding measures for trail maintenance.) 10 Points Available**

The City of Sheffield's Park and Recreation Department will be the responsible party for maintenance and daily upkeep of the trail. The recent significant financial investment of over four million dollars by the city in Park West, Inspiration Landing and Tuscumbia Landing reflects the commitment to ensure the area is revitalized and sustainable.

The annual maintenance budget will include \$500 per month for trash pickup and parking lot cleaning and \$500 per month for trail maintenance initially. Once Inspiration Landing opens, a percentage of the tax revenue from the development will be pledge toward trail maintenance and implementation of future phases of the trail master plan.

- 8. The degree to which community involvement is addressed: i.e., (A) Project idea originated with trail users or a community group that has substantial knowledge, and (B) The private sector (including individual citizens, community groups, and/or local business enterprises) has participated in the development of the proposed idea and has made commitments of labor, money, or materials to support project implementation. (Key Consideration: The objective is to determine if the project is responding to citizen-identified needs. The priority of the project to users is evidenced by citizen support for the idea. Points will be awarded to applicants demonstrating that the project concept was originally proposed at the grassroots level and, especially, for extensive citizen or private organization involvement in project development and support in project implementation as well as applicants demonstrating extensive involvement and participation from citizens and interest groups during all phases of application development and commitments beyond. Supporting documentation must be included in the application.) 10 Points Available**

Telling someone else's story through the landscape, especially a story that has a painful history, requires patience, sensitivity, and humility. The design team came into the project with the understanding that we are stewards of the Tuscumbia Landing story rather than the creators. In many ways, storytelling is more like story listening. If you want to tell someone else's story, the first step is to listen.

The design team listened in literal and metaphorical ways. We listened through research, by thoroughly assessing the numerous background documents prepared for the site, and through asking about and hearing others' stories to understand the priorities of the project. We listened through respect, by building on previous design concepts developed by NPS landscape architects and being mindful of the sensitive history and culture of the site; and we listened through our own individual experience, walking the site and taking in its historical presence and sense of place.

The project is the brainchild of local leaders and historians in the early 2000s and was developed and supported by NPS, FHWA, MSNHA and City of Sheffield with funding and expertise through partnerships and consultants.

This unique and undeniably special place is hallowed ground for the Tribes. Their involvement and support have been monumental for the progress. Included in this application packet is portion of the work that has been developed by the community, partners, and consultants. The sheer volume of research, reports and history speaks to the community support for this project.

A public meeting has been held annually in conjunction with city council meetings at city hall since 2018 to discuss the progress and partnerships at Tuscumbia Landing and Inspiration Landing.

9. Describe in detail how the trail will be managed. Include a discussion on season length, hours of operation, limitations on use, enforcement provisions, and scheduling. 10 Points Available

The trail will be managed and maintained by the City of Sheffield. The trail site will be open to the public year-round and connects to Inspiration Landing. Limitations of use will be no motorized vehicles or equestrian. The trail will be ADA compliant. Trail rules and regulations will be posted at the Park West parking lot at the entrance of the trail.

10. Identify and describe the service area of the project. Approximately how many people do you propose to serve with this project? Identify other trail resources in the service area by trail type (motorized, non-motorized, multi-use), distance, location in relation to the proposed trail, and ownership. (Key Consideration: The RTP was created to address trail needs in the urban and rural areas of the state. In order to assess the need for additional trails it is first necessary to identify the quantity and location of existing resources within the service area. It is also necessary to establish a service area – either population or resource based. For example, a population-based service area could be a neighborhood, school district, or political jurisdiction whereas, a resource-based service area might be defined along a linear greenway, water course, or unique natural/cultural area. However, in both instances, an estimate of the number of beneficiaries should be provided. Please identify how the project service area was determined.) 10 Points Available

There are two distinct service categories: north Alabama visitors (Colbert County) and National Park service Trail of Tears Historic Trail visitors.

The service area Colbert County is utilized by locals and people generally from north Alabama. These visitors seek outdoor activities centered around the Tennessee River. The City of Sheffield is located in Colbert County and all recreational activities owned by the county and neighboring cities are easily accessed from Sheffield. Here is a list of parks in the area:

- ▶TVA Reservation (Colbert County, Wilson Lake) is located 5.7 miles from Tuscumbia Landing and provides boat launch, hiking, biking, fishing and walking. The site has 12.5 miles of non-motorized trails. No camping.
- ▶Rose Trail Park (Colbert County, Pickwick Lake) is located 33.5 miles from Tuscumbia Landing and provides camping, boating, fishing, swimming and hiking.
- ▶Hawk Pride Mountain Offroad OHV Park (Colbert County) is located 11.3 miles from Tuscumbia Landing and provides camping and off-roading with recreational vehicles. Site has motorized trails only and is private park, open to public for a fee.
- ▶Riverfront Park (City of Sheffield) is located 3.1 miles from Tuscumbia Landing and has a boat launch and boundless playground with splashpad.
- ▶Gattman Park is located 4.4 miles from Tuscumbia Landing. Park has less than 1 mile of trail.
- ▶Spring Park is located 2.8 miles from Tuscumbia Landing. Park has no trails.

The secondary service area is the National Park Service's Trail of Tears Historic Trail. This trail system spans nine states and has millions of visitors annually with an economic impact of over 1 billion dollars according the NPS. The City of Sheffield seeks to place Tuscumbia Landing Trail on the national map for visitors to promote economic development, education, and historical significance. The Tuscumbia Landing Traill will be a significant tourism attraction for the City of Sheffield.

Tuscumbia Landing will add another waypoint to the Trail of Tears commemorative motorcycle ride with annual visitor numbers at 150,000 riders. The trail will incorporate Sheffield into the Chattanooga to Waterloo route.

Total Project Cost: \$348,393.76 Funds Requested: \$278,715.01

Important Note: The maximum grant amount by trail type is **\$200,000.00** for non-motorized, single-use trails; **\$400,000.00** for non-motorized, diverse-use trails; **\$524,937.00** for motorized trails; or **\$87,489.00** for education projects.

The applicant certifies that the data contained in the application is true and correct; the application has been duly authorized; and, the applicant understands that incorrect or incomplete information may cause the application to be rejected.

Steven R. Stanley
(Chief Elected Official's Signature)

Mayor
(Title)
09/12/22
(Date)

Project Cost Estimate

The Recreational Trails Program provides **80/20 matching** fund grants. That is, the RTP will fund up to 80 percent of the project cost and the grant recipient must provide at least 20 percent in the form of cash, in-kind, and/or donated contributions.

Eligible Costs

1. Design, engineering, and construction oversight services (**may not exceed 10% of the total construction cost**)
2. Direct labor
3. Special tradesmen secured under a service purchase contract
4. Rental of equipment
5. Construction contracts
6. Project materials
7. Signage¹
8. Land acquisition
9. Professional project administration (grant consultant) (**may not exceed 5% of total project cost**)

PROJECT DEVELOPMENT BUDGET

BUDGET ITEM	TOTAL	RTP SHARE	MATCHING SHARE
Acquisition			
Construction Contracts	334,994.00	267,995.20	66,998.80
Equipment Rental			
Labor			
Signage			
Supplies/Materials			
Administration			
Engineering	13,399.76	10,719.81	2,679.95
TOTAL PROJECT COST	348,393.76	278,715.01	69,678.75

¹ Signs which function as traffic control devices must conform with the Manual on Uniform Traffic Control Devices (MUTCD). Part IX of the MUTCD, Traffic Controls for Bicycle Facilities, covers the bicycle related signs, pavement markings, and signals which may be used on highways or bikeways. Part IX is applicable to shared use paths (non-motorized multiple-use trails which may provide a transportation purpose). The publication Standard Highway Signs has the detailed drawings for the highway signs prescribed in the MUTCD. These documents are available for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

Signs which do not function as traffic control devices are not subject to the MUTCD. However, informational signs and kiosks must take into consideration the needs of various users, such as: people who are blind or who have low vision, people who use wheelchairs, and children.



100% DESIGN COST ESTIMATE TUSCUMBIA LANDING - PHASE I

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	MOBILIZATION	1	LS	\$25,379.00	\$25,374.00
2	CONSTRUCTION SURVEYING	1	LS	\$6,000.00	\$6,000.00
3	ARCHAEOLOGICAL CONSULTATION	1	LS	\$10,000.00	\$10,000.00
4	CLEARING, GRUBBING, AND GRADING	1	LS	\$52,000.00	\$52,000.00
5	GENERIC SIGNING ITEM INTERPRETIVE PANEL	5	EA	\$5,000.00	\$25,000.00
6	MUTCD SIGN	3	EA	\$425.00	\$1,275.00
7	LIMIT OF DISTURBANCE/TREE PROTECTION FENCE	4879	LF	\$4.00	\$19,516.00
8	TEMPORARY MULCHING	0.7	ACR	\$1,400.00	\$924.00
9	SEED FOR DISTURBED AND LIMITED ACCESS AREAS	50	LB	\$9.00	\$450.00
10	FERTILIZER FOR REPAIR SEEDING	0.25	TON	\$1,700.00	\$425.00
11	FERTILIZER TOPDRESSING	0.25	TON	\$1,100.00	\$275.00
12	TIMBER BOARDWALK (40 LF - 10' WIDE)	1	LS	\$50,000.00	\$50,000.00
13	TREE PROTECTION FENCE/RESOURCE PROTECTION FENCE	748	LF	\$7.00	\$5,236.00
14	NATURAL SURFACE TRAIL	1606	LF	\$12.00	\$19,272.00
15	#57 STONE AGGREGATE BASE @ 4" DEPTH	146	TON	\$50.00	\$7,300.00
16	CRUSHER FINES @ 4" DEPTH	167	TON	\$65.00	\$10,855.00
17	5/8" X 2 1/2" STEEL FLAT	1	LS	\$17,926.80	\$17,926.80
18	7" RAILROAD TIES	2258	LF	\$9.40	\$21,225.20
19	18" ROADWAY PIPE	1	LS	\$6,000.00	\$6,000.00
20	WOODEN VEHICULAR GATE	1	LS	\$1,500.00	\$1,500.00
21	WOODEN BOLLARDS	12	EA	\$300.00	\$3,600.00

ESTIMATED CONTRACT COST	\$279,162.00
CONSTRUCTION CONTINGENCY (20%)	\$55,832.40
CONSTRUCTION CONTRACTS	\$334,994.40
CONSTRUCTION REVIEW 5%	\$13,399.76
TOTAL	\$348,393.76

Environmental Screening Form (ESF)

This is a working tool for planners and decision-makers to use to identify the degree of potential impacts to resources that may occur as a result of federal approval of the proposal. It also serves as the administrative record documenting the applicant's efforts to identify and consider impacts during proposal development. Your ESF responses may change as the planning process refines the proposal that will ultimately be submitted along with the final completed ESF for federal review and decision.

As early as possible in your planning process, consider how your proposal/project may have direct, indirect, and cumulative impacts on the human environment. Early identification of possible environmental resource impacts can be used during proposal development and assist in identifying ways to lessen impacts. Initiating or completing environmental analysis after a decision has been made is contrary to both the spirit and letter of the law of the National Environmental Policy Act.

The ESF should be completed with input from resource experts and in consultation with relevant local, state, tribal, and federal governments, as applicable. The interested and affected public should be notified of the proposal and invited to provide input as well. At a minimum, a site inspection of the affected area must be conducted by individuals who are familiar with the type of affected resources, possess the ability to identify potential resource impacts, and know when to seek additional data when needed.

At the time of proposal submission, the completed ESF should reflect the applicant's final determination of the extent to which the proposal will impact the list of resources on the form. The results of the completed ESF will assist in the identification of the appropriate NEPA pathway to be followed, i.e., categorical exclusion (CE), environmental assessment (EA), environmental impact statement (EIS). Also, the completed ESF will identify the resource topics and issues that should be presented and analyzed in an EA or an EIS, if required.

The ESF contains two parts that must be completed, Part A. Impacts to Environmental Resources and Part B. Mandatory Criteria.

Part A: For each environmental resource topic, choose an impact estimate level (none, negligible, minor, exceeds minor) that describes the degree of potential negative impact that may occur directly, indirectly, and cumulatively as a result of federal approval of your proposal. These impact levels should be used to estimate specific impact levels on each separate resource and must be accompanied with a brief explanation of how the resource might be affected, how the impact level was determined, and why the chosen impact level is appropriate. If an environmental review has already been conducted on your proposal, is still viable, and it includes planned mitigation, explain this for each applicable resource and choose an impact level as mitigated. If the resource does not apply to your proposal, mark NA in the first column. Add any relevant resources (see A24) if not included in the list.

Use a separate sheet to explain all potential adverse impacts (negligible, minor, and those exceeding minor) as well as to indicate the type of data that still needs to be determined for each of the applicable resources listed below. Describe direct, indirect, and cumulative impacts, as well as any planned mitigation, already addressed in previous environmental reviews.

Part B: This is a list of mandatory impact criteria that preclude the use of categorical exclusions. If you answer “yes” or “maybe” for any of the mandatory criteria, you must develop an EA or EIS regardless of your answers in Part A. Explain all “yes” and “maybe” answers on a separate sheet.

Indicate potential for **adverse** impacts.

A. ENVIRONMENTAL RESOURCES	No Impacts or Not Applicable	Negligible Impacts	Minor Impacts	Impacts Exceed Minor EA/EIS required	More Data Needed to Determine EA/EIS required
1. Geological resources: soils, bedrock, slopes, streambeds, landforms, etc.		X			
2. Air quality	X				
3. Sound (noise impacts)	X				
4. Water quality/quantity	X				
5. Streamflow characteristics	X				
6. Marine/estuarine	X				
7. Floodplains/wetlands	X				
8. Land use/ownership patterns; property values; community livability	X				
9. Circulation, transportation	X				
10. Plant/animal/fish species of special concern and habitat; state/federal listed or proposed for listing	X				
11. Unique ecosystems, such as biosphere reserves, World Heritage sites, old-growth forests, etc.	X				
12. Unique or important wildlife/wildlife habitat	X				
13. Unique or important fish/habitat	X				
14. Introduce or promote invasive species (plant or animal)	X				
15. Recreation resources, including parks, open space, conservation areas, rec. trails, facilities, services, opportunities, public access, etc.)	X				
16. Accessibility for populations with disabilities	X				
17. Overall aesthetics, special characteristics/features	X				
18. Historical/cultural resources, including landscapes, ethnographic, archeological, structures, etc.		X			
19. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure	X				
20. Minority and low-income populations	X				
21. Energy resources (geothermal, fossil fuels, etc.)	X				
22. Other agency or tribal land use plans or policies	X				
23. Land/structures with a history of contamination/hazardous materials even if remediated	X				
24. Other important environmental resources that should be addressed	X				

B. MANDATORY CRITERIA If your proposal is approved, would it...	Yes	No	To be determined
1. Have significant impacts on public health or safety?		X	
2. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands, wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (E.O. 11990); floodplains (E.O. 11988); and other ecologically significant or critical areas?		X	
3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?		X	
4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?		X	
5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?		X	
6. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?		X	
7. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office?(Attach SHPO/THPO Comments)	X		
8. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?		X	
9. Violate a federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment?		X	
10. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898)?		X	
11. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?		X	
12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area, or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?		X	
C. CATEGORICAL EXCLUSION CRITERIA			
13. Is the area previously disturbed and unlikely to result in any excavation beyond surface disturbance possibly impacting archaeology?	X		
14. Is the area regularly mowed and therefore unlikely to contain endangered species?		X	
15. Is there any surface water within direct proximity to the project which would require protection from construction impacts?	X		

Environmental Reviewers

The following individual(s) provided input in the completion of the environmental screening form. **List all reviewers including name, title, agency, field of expertise.** Keep all environmental review records and data on this proposal in state compliance file for any future program review and/or audit. **There must be at least one person listed here.**

1. Bart Taft, Professional Engineer, The Kelley Group, Civil Design & BMPs.
2. _____
3. _____

The following individuals conducted a site inspection to verify field conditions. **List name of inspector(s), title, agency, and date(s) of inspection. There must be at least one person listed here.**

1. Michael McConnel, Environmental Scientist, AST, 2018
2. _____
3. _____

Signature of Chief Elected Official here:

Steven R. Stanley
Signature

09/12/22

Date

Environmental Checklist For Recreational Trails Program Project**County:** Colbert**Project Location:** Park West (Blackwell Rd / Fontana Street) Sheffield, AL 35660**Project Sponsor/Applicant:** City of Sheffield**Project Description:** 8' wide crushed aggregate trail 2109' in length and 10' wide boardwalk 40' long and 1606' natural trail.

Concurrence from Alabama Historical Commission attached?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Concurrence from U.S. Fish and Wildlife Services attached?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Concurrence from the U.S. Army Corps of Engineers attached?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Tribal Consultation attached?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Was the property acquired before January 1971?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If "No" explain property acquisition process (Use additional sheets if necessary):		

Note: If you have not received the concurrence letters by the application deadline, submit copies of the request letters. Concurrences over three (3) years old cannot be used and new concurrences must be obtained.

Required Letters of Concurrence and Release of Conditions**U.S. Army Corps of Engineers**

Mobile District Corps of Engineers	Nashville District Corps of Engineers
Chief, Regulatory Division	Western Regulatory Field Office
Post Office Box 2288	2424 Danville Road, SW, STE N
Mobile, Alabama 36628-0001	Decatur, Alabama 35603-4219
Phone: 251-690-2658	Phone Number: 256-350-5620

Alabama Historical Commission: Amanda McBride, Environmental Review Coordinator, Alabama Historical Commission, Post Office Box 300900, Montgomery, Alabama 36130-0900, Phone: 334-230-2692, Email: amanda.mcbride@ahc.alabama.gov

U.S. Fish And Wildlife Service: Mr. Bill Pearson, Field Supervisor, U.S. Fish and Wildlife Service, 1208-B Main Street, Daphne, Alabama 36526-4419, Phone: 251-441-5181, Email: bill_pearson@fws.gov.

City of Sheffield
Recreational Trails Program – Application
Timeline for Implementation
September 12, 2022

March 2022 – December 2022

ADECA RTP application window and award

January 2023

Engineering plans are complete. Project is shovel ready.
Advertisement for bids

February 2023

Award of contract

March 2023

Construction kick-off meeting

April 2023-December 2023

Construction

January 2024

Project closeout

55,871

SPECIAL WARRANTY DEED

THIS INDENTURE, made and entered into by and between UNITED STATES OF AMERICA, acting herein by and through Tennessee Valley Authority (hereinafter sometimes referred to as "Authority"), a corporation created and existing under an Act of Congress, known as the "Tennessee Valley Authority Act of 1933," as amended, and TENNESSEE VALLEY AUTHORITY, each hereinafter referred to as "Grantor," and CITY OF SHEFFIELD, ALABAMA, hereinafter referred to as "Grantee,"

WITNESSETH:

WHEREAS, Section 4(k)(d) of the above mentioned Act of Congress authorized the Authority, in the name of the United States of America, to convey Nitrate Plant Numbered 1, of which the following described land is a part, with the approval of the President and the War Department; and

WHEREAS, no permanent dam, hydroelectric power plant, fertilizer plant, or munitions plant is located on the land hereinafter described; and

WHEREAS, the sale of the land hereinafter described has been duly approved by the President of the United States and the War Department;

NOW, THEREFORE, in consideration of and pursuant to the terms of contract TV-6257A, entered into between Authority and Grantee, Grantor does hereby, subject to the stipulations hereinafter set forth, grant, bargain, sell, transfer and convey unto Grantee, for municipal purposes only:

TRACT NO. KNPT-30

A tract of land lying in Colbert County, State of Alabama, in Sec. 5, T18S, R11W, on the shores of the Spring Creek Embayment of Pickwick Landing Lake immediately east of Wilson Dam Village No. 1, the said tract being comprised of four parcels and being more particularly described as follows:

Parcel No. 1

Beginning at a point (Coordinates: N. 1,723,005; E. 435,486) in the 423-foot contour on the shores of the Spring Creek Embayment of Pickwick Landing Lake and in the boundary of the Nitrate Plant No. 1 Reservation on the west side of a road; thence with the boundary of the Nitrate Plant No. 1 Reservation S. 5° 51' E., 451 feet to a point in the 423-foot contour on the shore of the Spring Creek Embayment of the lake; thence leaving the boundary of the Nitrate Plant No. 1 Reservation and with the 423-foot contour as it meanders first in a general northwesterly direction and thence in a northeasterly direction to the point of beginning, and containing 1.7 acres, more or less.

Parcel No. 2

Beginning at an angle iron (Coordinates: N. 1,724,760; E. 435,590) in the west right of way line of a road and in the boundary of the Nitrate Plant No. 1 Reservation; thence with the boundary of the Nitrate Plant No. 1 Reservation

Kate McClain, an unmarried woman, dated April 5, 1918, recorded in Deed Book 27, page 104; deed from W. A. Stansell et al, dated August 26, 1918, recorded in Deed Book 28, page 148; deed from W. A. Reid et al, dated April 8, 1918, recorded in Deed Book 24, page 561; deed from North Alabama Stone Company, a corporation, dated April 27, 1918, recorded in Deed Book 27, page 373; deed from W. A. Reid, et al, dated April 13, 1918, recorded in Deed Book 24, page 563; deed from Sephus Ramsay et ux, dated April 9, 1918, recorded in Deed Book 27, page 232; deed from Tom Gipson, et ux, dated July 1, 1918, recorded in Deed Book 27, page 231; deed from John F. Funks et al, dated April 20, 1918, recorded in Deed Book 27, page 154; deed from John W. Johnson, Commissioner, dated June 11, 1921, recorded in Deed Book 35, page 1; deed from J. W. Long et ux, dated August 18, 1918, recorded in Deed Book 34, page 538; deed from J. W. Long, et ux, dated April 17, 1918, recorded in Deed Book 27, page 65; deed from James Wisdom et ux, dated April 16, 1918, recorded in Deed Book 27, page 175; deed from William Steele et al, dated April 16, 1918, recorded in Deed Book 24, page 520; deed from William Steele, et ux, dated April 15, 1918, recorded in Deed Book 27, page 177; deed from William Steele et al, dated April 6, 1918, recorded in Deed Book 27, page 75; deed from J. E. Deloney, Jr., an unmarried man, dated June 26, 1918, recorded in Deed Book 27, page 483; deed from William Steele et al, dated April 16, 1918, recorded in Deed Book 27, page 70; deed from William Steele et al, dated April 17, 1918, recorded in Deed Book 27, page 72; deed from Ephraim Pruett, a single man, et al, dated April 19, 1918, recorded in Deed Book 27, page 481; deed from W. G. Halsey, et ux, dated August 13, 1918, recorded in Deed Book 27, page 485 and deed from F. D. Jenkins et ux, dated April 13, 1918, recorded in Deed Book 27, page 95, all instruments recorded in the office of the Probate Judge, Colbert County, Alabama.

It is understood and agreed that the above described land is conveyed subject to such rights as may be vested in the public to an abandoned county road.

TRACT NO. KNPT-32

A tract of land lying in Colbert County, State of Alabama, in Sec. 5, T4S, R11W, on the east side of the Spring Creek Embayment of Pickwick Landing Lake at Wilson Dam Village No. 1, and more particularly described as follows:

Beginning at an angle iron at the intersection of the south line of Norris Circle and the west line of Pickwick Street; thence with the west line of Pickwick Street S. 5° 00' E., 700.0 feet to an angle iron in the north line of Norris Circle; thence with the north line of Norris Circle S. 85° 01' W., 302.0 feet, passing a concrete monument at 2.0 feet, to a concrete monument; thence with a curve having a radius of 350.0 feet as it curves to the right in a general northerly direction 1099.6 feet to a concrete monument; thence with the south line of Norris Circle N. 85° 01' E., 302.0 feet, passing a concrete monument at 300.0 feet, to the point of beginning, and containing 9.3 acres, more or less.

The positions of corners and directions of lines are referred to the Alabama (West) Coordinate System.

The above described tract of land was acquired by the United States of America by virtue of deed from North Alabama Stone Company, a corporation, dated April 27, 1918, recorded in Deed Book 27, page 373 and deed from Fannie R. Blair, a widow, et al, dated October 7, 1918, recorded in Deed Book 31, page 565, both instruments recorded in the office of the Probate Judge, Colbert County, Alabama.

TRACT NO. KNPT-33

A tract of land lying in Colbert County, State of Alabama, in Secs. 5 and 6, T4S, R11W, on the east side of the Spring Creek Embayment of Pickwick Landing Lake at Wilson Dam Village No. 1, the said tract comprising two parcels and being more particularly described as follows:

Parcel No. 1

Beginning at an angle iron in the south line of Wilson Dam Avenue and at the northwest corner of Lot 1 of the Wilson Dam No. 1 Subdivision; thence with the line of the said lot S. 6° 15' E., 141.2 feet to an angle iron; thence S. 70° 14' E., 152.4 feet to an angle iron in the west line of Gunterville Circle; thence with the west line of Gunterville Circle and with a curve having a radius of 120.0

The above described tract of land was acquired by the United States of America by virtue of the deed from Fannie R. Blair, a widow, et al, dated October 7, 1918, recorded in Deed Book 31, page 565, in the office of the Probate Judge, Colbert County, Alabama.

TRACT NO. XNPT-37

A tract of land lying in Colbert County, State of Alabama, in Sec. 32, T3S, R11W, on the east side of the Spring Creek Embayment of Pickwick Landing Lake at Wilson Dam Village No. 1, and more particularly described as follows:

Beginning at an angle iron at the intersection of the southeast line of Wilson Dam Avenue and the west line of Pickwick Street; thence with the west line of Pickwick Street S. 1° 46' E., 173.8 feet to an angle iron in the north line of Douglas Street; thence with the north line of Douglas Street S. 85° 33' W., 217.9 feet to an angle iron in the southeast line of Wilson Dam Avenue; thence with the southeast line of the avenue N. 48° 00' E., 284.9 feet to the point of beginning, and containing 0.44 acre, more or less.

The positions of corners and directions of lines are referred to the Alabama (West) Coordinate System.

The above described tract of land was acquired by the United States of America by virtue of the deed from Sheffield Development Company, a corporation, dated April 17, 1918, recorded in Deed Book 28, page 158, in the office of the Probate Judge, Colbert County, Alabama.

TRACT NO. XNPT-41

A tract of land lying in Colbert County, State of Alabama, in Secs. 31 and 32, T3S, R11W, on the north shores of the Spring Creek Embayment of Pickwick Landing Lake, immediately north of Wilson Dam Village No. 1, the said tract being bounded on the lakeward side by the 423-foot contour on the shores of the lake and the embayment of the lake and on the landward side by a line described as follows:

Beginning at an angle iron (Coordinates: N. 1,727,794; E. 432,090) in the 423-foot contour on the southeast shore of Pickwick Landing Lake near the mouth of the Spring Creek Embayment of the lake; thence S. 64° 50' E., 21 feet to an angle iron; thence S. 88° 57' E., 467 feet to US-TVA Monument 42-6; thence N. 68° 12' E., 114.9 feet to US-TVA Monument 42-5 which is 25 feet southwest of and opposite a point in the center line of an abandoned railroad track; thence with a line 25 feet from and parallel to the center line of the abandoned railroad track and with a curve having a radius of 385.2 feet as it curves to the right in a southeasterly direction 200 feet to an angle iron; thence S. 40° 22' E., 57 feet to an angle iron; thence with a curve having a radius of 566.3 feet as it curves to the left in a general easterly direction 942 feet to an angle iron; thence N. 44° 17' E., 569 feet, passing an angle iron at 544 feet, to an angle iron in the center line of a road; thence with the center line of the road as it meanders approximately along the following bearings and distances: S. 38° 40' E. 176 feet to an angle iron, S. 32° 29' E. 106 feet, S. 5° 21' W. 204 feet, and S. 25° 36' E. 163 feet to an angle iron; thence, leaving the road, S. 45° 54' W., 520 feet to an angle iron; thence S. 44° 06' E., 280 feet to an angle iron in the northwest line of Cherokee Pike; thence with the line of Cherokee Pike S. 45° 35' W., 200 feet to an angle iron, a corner to Lot 143 of the Wilson Dam Village No. 1 Subdivision; thence, leaving the line of the pike, N. 44° 06' W., 200.0 feet to an angle iron; thence S. 45° 54' W., 506.6 feet to an angle iron in the north right of way line of Fontana Street; thence with the right of way line of the street N. 72° 05' W., 357.7 feet to an angle iron; thence S. 83° 56' W., 679.2 feet to an angle iron; thence, leaving the right of way line of the street, N. 5° 46' E., 52.7 feet, passing an angle iron at 15.2 feet, to US-TVA Monument NP-1-72A in the 423-foot contour on the south shore of a small inlet of the lake at the mouth of the inlet.

The land as described above contains 48.7 acres, more or less.

TREES, BUSHES, UNDERGROWTH AND OTHER OBSTRUCTIONS INTERFERING WITH THE CONSTRUCTION, MAINTENANCE AND REPAIR OF PIPE LINES AND/OR MAINS ON, OVER, ACROSS, THROUGH AND UNDER THE LAND SHOWN ON THE ATTACHED EXHIBITS "A", "B" AND "C".

(3) U. S. NITRATE PLANT NO. 1 HIGHWAY AND THE WILSON DAM VILLAGE NO. 1 STREET SYSTEM TOGETHER WITH PERMANENT EASEMENTS AND RIGHTS OF WAY FOR SUCH RIGHTS AS ARE REQUIRED TO CONSTRUCT, MAINTAIN, REPAIR, AND REBUILD ALL PRESENTLY EXISTING AND PROPOSED STREETS AND HIGHWAYS IN THE LOCATIONS AND AT SUCH WIDTHS AS ARE INDICATED IN YELLOW ON THE MAPS ATTACHED.

FURTHERMORE, GRANTOR AGREES TO CONVEY TO GRANTEE ADDITIONAL RIGHTS OF WAY FOR HIGHWAY, PIPE LINE, AND ELECTRIC DISTRIBUTION LINE PURPOSES AT SUCH LOCATIONS ACROSS SPRING CREEK AND CONTIGUOUS LAND OF THE GRANTOR AS MAY BE DESIRED FROM TIME TO TIME BY GRANTEE, SUBJECT TO APPROVAL BY THE BOARD OF DIRECTORS OF THE AUTHORITY OF ANY PLANS FOR CONSTRUCTION, OPERATION, AND MAINTENANCE OF ANY STRUCTURES ON AND OVER SAID RIGHTS OF WAY IN ACCORDANCE WITH SECTION 26a OF THE TENNESSEE VALLEY AUTHORITY ACT OF 1933, AS AMENDED. SUCH CONVEYANCES SHALL NOT CONSTITUTE APPROVAL OF SUCH STRUCTURES OR IMPLY A WAIVER OF THE NECESSITY OF OBTAINING APPROVAL.

IT IS UNDERSTOOD AND AGREED THAT THOSE PORTIONS OF TRACTS XNPT-30 AND XNPT-41 LOCATED BELOW THE 445-FOOT CONTOUR ELEVATION ARE SOLD SUBJECT TO ANY TEMPORARY AND INTERMITTENT FLOODING THAT MAY RESULT FROM THE ERECTION AND OPERATION OF ANY DAM OR DAMS ACROSS THE TENNESSEE RIVER AND ITS TRIBUTARIES AND ALSO SUBJECT TO THE RIGHT TO TEMPORARILY AND INTERMITTENTLY FLOOD ANY PORTION OF ANY ROAD SERVING TRACTS XNPT-30 AND XNPT-41.

ARE HEREBY RESERVED FOR THE USE OF THE UNITED STATES, TOGETHER WITH THE RIGHT OF THE UNITED STATES THROUGH ITS AUTHORIZED AGENTS OR REPRESENTATIVES AT ANY TIME TO ENTER UPON THE LAND AND PROSPECT FOR, MINE, AND REMOVE THE SAME, MAKING JUST COMPENSATION FOR ANY DAMAGE OR INJURY OCCASIONED THEREBY. HOWEVER, SUCH LAND MAY BE USED, AND ANY RIGHTS OTHERWISE ACQUIRED BY THIS DISPOSITION MAY BE EXERCISED, AS IF NO RESERVATION OF SUCH MATERIALS HAD BEEN MADE; EXCEPT THAT, WHEN SUCH USE RESULTS IN THE EXTRACTION OF ANY SUCH MATERIAL FROM THE LAND IN QUANTITIES WHICH MAY NOT BE TRANSFERRED OR DELIVERED WITHOUT A LICENSE UNDER THE ATOMIC ENERGY ACT OF 1946, AS IT NOW EXISTS OR MAY HEREAFTER BE AMENDED, SUCH MATERIAL SHALL BE THE PROPERTY OF THE UNITED STATES ATOMIC ENERGY COMMISSION, AND THE COMMISSION MAY REQUIRE DELIVERY OF SUCH MATERIAL TO IT BY ANY POSSESSOR THEREOF AFTER SUCH MATERIAL HAS BEEN SEPARATED AS SUCH FROM THE ORES IN WHICH IT WAS CONTAINED. IF THE COMMISSION REQUIRES THE DELIVERY OF SUCH MATERIAL TO IT, IT SHALL PAY TO THE PERSON MINING OR EXTRACTING THE SAME, OR TO SUCH OTHER PERSON AS THE COMMISSION DETERMINES TO BE ENTITLED THERETO, SUCH SUMS, INCLUDING PROFITS, AS THE COMMISSION DEEMS FAIR AND REASONABLE FOR THE DISCOVERY, MINING, DEVELOPMENT, PRODUCTION, EXTRACTION, AND OTHER SERVICES PERFORMED WITH RESPECT TO SUCH MATERIAL PRIOR TO SUCH DELIVERY, BUT SUCH PAYMENT SHALL NOT INCLUDE ANY AMOUNT ON ACCOUNT OF THE VALUE OF SUCH MATERIAL BEFORE REMOVAL FROM ITS PLACE OF DEPOSIT IN NATURE. IF THE COMMISSION DOES NOT REQUIRE DELIVERY OF SUCH MATERIAL TO IT, THE RESERVATION HEREBY MADE SHALL BE OF NO FURTHER FORCE OR EFFECT.

THERE IS ALSO RESERVED TO THE GRANTOR AND ITS ASSIGNS THE THREE-STALL GARAGE BUILDING LOCATED ON TRACT XNPT-33, TOGETHER WITH THE RIGHT TO MAINTAIN THE SAID STRUCTURE IN ITS PRESENT LOCATION AND USE THE PRESENTLY EXISTING ACCESS RIGHT OF WAY FOR A PERIOD OF FOURTEEN MONTHS FROM MAY 10, 1949. PROVIDED, HOWEVER, THAT THE GRANTOR OR ITS ASSIGNS WILL REMOVE THE BUILDING FROM SAID TRACT OF LAND ON OR BEFORE THE EXPIRATION OF SAID PERIOD AND UPON FAILURE TO DO SO, TITLE TO THE SAME SHALL VEST ABSOLUTELY IN THE GRANTEE.

IN ACCEPTING THIS CONVEYANCE, HOWEVER, THE GRANTEE, FOR ITSELF, AND FOR ITS SUCCESSORS AND ASSIGNS, COVENANTS AND AGREES TO AND WITH THE GRANTOR THAT THE FOLLOWING SHALL CONSTITUTE REAL COVENANTS WHICH SHALL ATTACH TO AND RUN WITH THE ABOVE DESCRIBED LAND AND SHALL BE BINDING UPON ANYONE WHO MAY HEREAFTER COME INTO OWNERSHIP THEREOF, WHETHER BY PURCHASE, DEVISE, DESCENT, OR SUCCESSION:

IN WITNESS WHEREOF, the Tennessee Valley Authority, acting herein for itself and as legal agent of the United States of America, and being duly authorized so to do, has caused this instrument to be executed in its name and in the name of the United States of America, by its authorized officers, and its corporate seal to be hereunto affixed, on this the 4th day of May, 1949.

UNITED STATES OF AMERICA

Attest:

BY TENNESSEE VALLEY AUTHORITY, its
legal agent

John Randolph Garry
Assistant Secretary

By Geo. M. Baker
Chief of Land Branch

Attest:

TENNESSEE VALLEY AUTHORITY

John Randolph Garry
Assistant Secretary

By Geo. M. Baker
Chief of Land Branch

STATE OF TENNESSEE }

COUNTY OF KNOX }

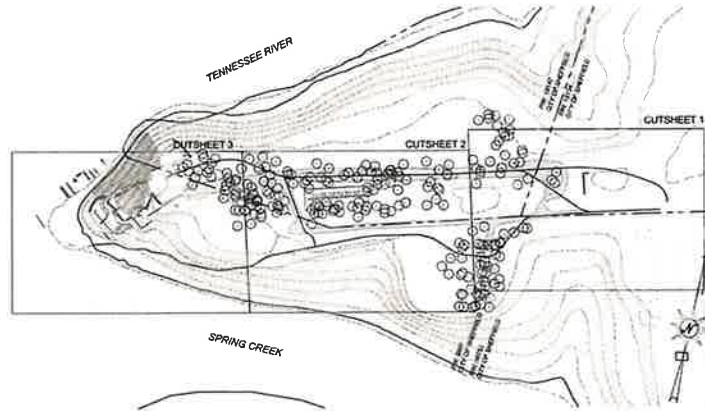
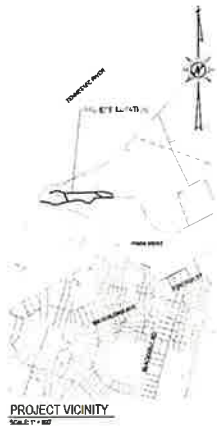
I, Thos Lee Myratt, a Notary Public in and for said County in said State, hereby certify that Geo. M. Baker and John Randolph Garry whose names are signed to the foregoing conveyance as Chief of the Land Branch and Assistant Secretary, respectively, of the TENNESSEE VALLEY AUTHORITY, a corporation and legal agent for the UNITED STATES OF AMERICA, and who are known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, they, as such officers and with full authority, executed the same voluntarily for and as the act and deed of said corporation and of the UNITED STATES OF AMERICA.

GIVEN under my hand this 4th day of May, 1949.

Thos Lee Myratt
Notary Public

My Commission Expires January 10th, 1953

SHEFFIELD, AL TRAIL OF TEARS NATIONAL HISTORIC TRAIL AT TUSCUMBIA LANDING 100% DESIGN SUBMISSION SEPT 2021



SITE LAYOUT
SCALE 1"=100'

PROJECT OWNER

City of Sheffield, AL
Mayor Steve Stanley
600 N Montgomery Avenue
Sheffield, AL 35660
256 383 0250

PROJECT CONSULTANTS

Alta Planning + Design, Inc.	The Kelley Group
84 Peachtree St NW	105 W 2nd St
Suite 600	Tusculumbia, AL 35674
Atlanta, GA 30303	256 248 7030
470 290 1200	

GENERAL NOTES

- 1 A MINIMUM OF 24 HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF SHEFFIELD BUILDING DEPARTMENT AT (256) 386-5808.
- 2 ALL NEWLY CUT OR FILLED AREAS LACKING ADEQUATE VEGETATION SHALL BE MULCHED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
- 3 CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
- 4 ALL FILL SOILS SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-698) WITHIN 3% OF OPTIMUM MOISTURE CONTENT IN LIFTS NOT TO EXCEED SIX (6) INCHES OF COMPACTED THICKNESS.
- 5 ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE STATE OF ALABAMA STANDARD CONSTRUCTION SPECIFICATIONS.
- 6 PROPERTY BOUNDARIES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION, GRADING, AND CLEARING, AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
- 7 VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION, NOTIFY THE CITY OF SHEFFIELD BUILDING DEPARTMENT OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
- 8 ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
- 9 THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SALTATION INTO SURROUNDING HYDROLOGIC FEATURES AND/OR ADJACENT PROPERTIES.
- 10 EXISTING SITE DATA INCLUDING BUT NOT LIMITED TO LOCATIONS OF EXISTING ROADWAY, CULTURAL SITES, AND TREES ARE BASED ON AERIAL PHOTOGRAPHY AND GIS DATA AND SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

DRAWING INDEX

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17 - 19	PROFILES
20 - 25	DETAILS

PROJECT NO: 2021-04
DESIGNED BY: M
DRAWN BY: C
REVIEWED BY: M
DATE: 10.30.2021
SCALE: 1"=100'

DATE: 10.30.2021
SCALE: 1"=100'



100% DESIGN SUBMISSION

TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

COVER SHEET

CG001

SHEET 1 OF 25

GENERAL NOTES

ALABAMA STATE DEPARTMENT OF TRANSPORTATION MATERIAL AND CONSTRUCTION SPECIFICATIONS SHALL BE IN EFFECT FOR THIS PROJECT.

CURRENT NATIONAL "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) SHALL BE IN EFFECT FOR THIS PROJECT.

ADDITIONAL NOTES MAY BE FOUND ON SUBSEQUENT DRAWINGS. SUCH NOTES, WHILE PERTAINING TO THE SPECIFIC DRAWING THEY ARE PLACED ON, ALSO SUPPLEMENT THE GENERAL NOTES LISTED HEREIN.

THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTION, USAR DATA, AND AVAILABLE SURVEY INFORMATION ON FILE WITH THE CITY OF SHEFFIELD. A FIELD SURVEY WAS NOT RUN PRIOR TO THE DEVELOPMENT OF THESE PLANS. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH THE CONDITIONS AND A.O.B.E.

THE CONTRACTOR SHALL EXAMINE AND VERIFY IN THE FIELD ALL EXISTING CONDITIONS AND DIMENSIONS WITH THOSE SHOWN ON THE PLANS. THE CONTRACTOR SHALL USE THE FIELD CONDITIONS AND DIMENSIONS, AND NOTE ANY CHANGES TO THOSE SHOWN ON THE PLANS. A.O.B.E. THE RESULTS OF THIS CHECK OF CONDITIONS AND DIMENSIONS SHALL BE SO NOTED ON THE DRAWINGS SUBMITTED FOR APPROVAL.

THERE SHALL BE NO CLAIM AGAINST THE CITY OF SHEFFIELD OR THE DESIGN CONSULTANT BY THE CONTRACTOR FOR WORK PERTAINING TO MODIFICATIONS AS MAY BE REQUIRED DUE TO ANY DIFFERENCE BETWEEN ACTUAL FIELD CONDITIONS AND THOSE SHOWN BY THE DETAILS AND DIMENSIONS ON THE CONTRACT PLANS. THE CONTRACTOR WILL BE PAID AT THE UNIT BID PRICE FOR THE ACTUAL QUANTITIES OF MATERIALS USED OR FOR THE WORK PERFORMED, AS INDICATED BY THE VARIOUS ITEMS IN THE CONTRACT.

AT ALL TIMES, THE CONTRACTOR SHALL TAKE MEASURES TO PROVIDE POSITIVE DRAINAGE OF SURFACE RUNOFF FROM THE WORK SITE AND CONTROL OF THE RUNOFF TO PREVENT EROSION, POLLUTION, SEDIMENTATION OR OTHER DISCHARGES WHICH WOULD AFFECT PROPERTIES ADJACENT TO THE WORK SITE. ALL MEASURES TAKEN TO PROVIDE POSITIVE DRAINAGE SHALL BE APPROVED BY THE CITY OF SHEFFIELD PRIOR TO CONSTRUCTION. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.

THE CONTRACTOR SHOULD NOTE THAT ADDITIONAL WORK MAY BE REQUIRED AS THE CONTRACT PROGRESSES WHICH IS NOT SHOWN OR NOTED ON THE PLANS. THIS WORK SHALL BE PERFORMED BY THE CONTRACTOR A.O.B.E. AND PAYMENT SHALL BE MADE AT THE BID PRICE FOR THE APPROPRIATE ITEMS.

THE CLEARING AND GRUBBING ITEM SHALL CONSIST OF THE REMOVAL OF THE BRUSH AND TREE STUMPS WITHIN THE PROJECT LIMITS WHERE INDICATED ON THE PLANS AND A.O.B.E. IN ADDITION, TREE BRANCHES OVERHANGING THE EDGE OF THE PROPOSED TRAIL LIMITS SHALL BE TRIMMED BACK TO PROVIDE A 12.0 FOOT VERTICAL CLEARANCE. CONTRACTOR MAY NOT BURY STUMPS. NO SEPARATE PAYMENT SHALL BE MADE FOR WORK CALLED FOR BY NOTES ON THE PLANS, IN THE SPECIFICATIONS, OR UNDER THE HEADING GENERAL NOTES UNLESS PAYMENT IS SPECIFICALLY INDICATED BY ITEM NUMBER. THE COST OF WORK FOR WHICH NO SEPARATE PAYMENT IS INDICATED SHALL BE INCLUDED IN THE

UNIT PRICES BID FOR THE VARIOUS ITEMS IN THE CONTRACT. WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE PRICE BID FOR THOSE ITEMS.

THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORTS, BRACING OR OTHER DEVICES THAT MAY BE REQUIRED OR THAT MAY BE DIRECTED BY THE ENGINEER TO PROTECT THE SAFETY OF ADJACENT STRUCTURES, ROADWAYS OR THE VARIOUS ITEMS IN THE CONTRACT. NO SEPARATE PAYMENT SHALL BE MADE.

PAVED AREAS DISTURBED BY THE CONTRACTOR WHICH ARE NOT PART OF THE WORK TO BE PERFORMED UNDER THIS CONTRACT, SHALL BE RESTORED TO AN ACCEPTABLE CONDITION AS SPECIFIED BY AND SATISFACTORY TO THE CITY OF SHEFFIELD ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS.

PROVISIONS TO DE-WATER EXCAVATIONS, DUE TO CONSTRUCTION OPERATIONS ALONG THE PROJECT MAY BE REQUIRED. THERE SHALL BE NO SEPARATE PAYMENT FOR ANY DE-WATERING SYSTEMS. COST SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.

THE CONTRACTOR SHALL KEEP ALL DRAINAGE FACILITIES, WITHIN THE CONTRACT LIMITS, CLEAN AND FULLY OPERATIONAL AT ALL TIMES (A.O.B.E.). THIS WORK SHALL BE INCLUDED UNDER VARIOUS ITEMS IN THE CONTRACT.

THE CONTRACTOR SHALL PROVIDE SURVEY AND STAKEOUT. THE CONTRACTOR SHALL BE REQUIRED TO PROTECT THEIR WORKERS AT ALL TIMES IN CONFORMANCE WITH APPLICABLE OSHA REGULATIONS.

WATERING NEEDED FOR VEGETATION AND OTHER LANDSCAPING ITEMS SHALL BE INCLUDED UNDER EACH RESPECTIVE ITEM IN THE CONTRACT.

DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY.

UTILITY NOTES

LOCATION OF UTILITIES, PUBLIC AND/OR PRIVATE, INDICATED ON THE PLANS AS EXISTING AND/OR TO BE CONSTRUCTED ARE APPROXIMATE ONLY. THEIR EXACT LOCATIONS SHALL BE VERIFIED BY A G.O. LOCATE SERVICE PRIOR TO CONSTRUCTION.

COMMENCEMENT, ADDITIONAL UTILITY LINES, WHETHER ABANDONED OR IN SERVICE, MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT OPERATIONS AND TAKE NECESSARY PRECAUTIONS SUCH THAT INTERFERENCE WITH OR DAMAGE TO THESE OR OTHER FACILITIES DURING THE COURSE OF CONSTRUCTION IS PREVENTED. PRIOR TO ANY EXCAVATION, THE CONTRACTOR IS TO CALL ALABAMA 811 TO HAVE UNDERGROUND UTILITIES LOCATED.

IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY SERVICE, CAUSING THE INTERRUPTION IN SAID SERVICE, THE CONTRACTOR SHALL IMMEDIATELY COMMENCE WORK TO RESTORE SERVICE AND MAY NOT CEASE WORK UNTIL SERVICE IS RESTORED. ALL COSTS TO REPAIR OR REPLACE DAMAGE UTILITIES SHALL BE AT THE EXPENSE OF THE CONTRACTOR. IF THE CONTRACTOR DOES NOT MAKE IMMEDIATE NECESSARY REPAIRS, THE RESPECTIVE OWNING COMPANIES OR MUNICIPAL REPAIRS MAY

DO THE WORK, AND THE COST THEREOF CHARGED AGAINST THE CONTRACTOR.

THE CONTRACTOR SHALL MAKE EXPLORATIONS IF NECESSARY A.O.B.E. TO DETERMINE THE DIMENSIONS AND LOCATIONS OF LINES THAT MAY BE SUBJECT TO DAMAGE.

THE CONTRACTOR SHALL PROTECT ALL UNDERGROUND UTILITIES TO REMAIN IN PLACE FROM DAMAGE DURING THE CONSTRUCTION. METHODS OF PROTECTION MAY INCLUDE STEEL PLATES OVER THE UTILITY SO THAT WHEEL LOADINGS FROM CONSTRUCTION VEHICLES DO NOT DAMAGE THE UTILITY.

DAMAGE TO EXISTING STRUCTURES; VEGETATION/SHRUBS; OR OTHER AMENITIES

NUMEROUS STRUCTURES AND VEGETATION/SHRUBS ARE PRESENT WITHIN THE WORK LIMITS AND ARE TO REMAIN UNDISTURBED. THE CONTRACTOR SHALL TAKE EXTRA PRECAUTIONS TO PROTECT THESE ITEMS. ALL DAMAGE TO THE EXISTING STRUCTURES OR MATERIALS WHICH ARE NOT PART OF THE INTENDED WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR WITHOUT COST TO THE OWNER AND TO THE SATISFACTION OF THE CITY OF SHEFFIELD ENGINEER.

MAINTENANCE JURISDICTION

UPON COMPLETION OF THE PROJECT, THE TRAIL, INCLUDING BRIDGES AND DRAINAGE, WILL BE MAINTAINED BY CITY OF SHEFFIELD.

RIGHT-OF-WAY NOTES

THE CONTRACTOR IS TO CONFINE ALL WORK IS BEING PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY (ROW) OR ON CITY OWNED PROPERTY, INCLUDING BUT NOT LIMITED TO VEHICLE ACCESS, STORAGE OF EQUIPMENT, MATERIALS, DEBRIS AND WASTE, LANDSCAPING, VEGETATION REMOVAL AND MANAGEMENT, GRADING, SEEDING AND THE INSTALLATION OF TURF, AND THE INSTALLATION OF ANY FENCES OR PROTECTIVE BARRIER UNLESS SPECIFIC AGREEMENTS ARE MADE BETWEEN THE CONTRACTOR AND LANDOWNER PERMITTING SUCH ACTIVITIES.

IF THE CONTRACTOR IS UNABLE TO DETERMINE THE LIMITS OF THE RIGHTS-OF-WAY WHEN THE CONTRACT CALLS FOR WORK IN THOSE VICINITIES, THE CONTRACTOR MUST CONTACT THE PROJECT ENGINEER FOR DEFINITIVE BOUNDARY DETERMINATIONS BEFORE ANY WORK MAY BE INITIATED AT THOSE LOCATIONS.

RELEASES FOR ANY NON-ESSENTIAL CONTRACT WORK OUTSIDE OF THE EXISTING RIGHTS OF WAY, INCLUDING PLANTINGS, LANDSCAPING OR DRIVEWAY ENHANCEMENT, ARE PROVIDED BY THE CITY OF SHEFFIELD AND IN NO MANNER ARE TO BE SECURED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT INVADE UPON PRIVATE PROPERTIES, LANDS OR BUILDINGS OUTSIDE OF THE RIGHTS-OF-WAY FOR ANY REASON WITHOUT FIRST SECURING WRITTEN PERMISSION FROM THE PROPERTY OWNER.

THE CONTRACTOR WILL BE HELD LIABLE FOR ANY DAMAGES DONE TO PRIVATE PROPERTY. ANY SUCH INJURIES OR DAMAGES SHALL

BE SATISFACTORILY REPAIRED OR ITEMS REPLACED AT THE CONTRACTORS EXPENSE.

EXCAVATION NOTES

ASSUME ALL EXCAVATED MATERIAL IS 400T SUITABLE FOR EMBANKMENT CONSTRUCTION.

SUBGRADE IMPROVEMENTS ARE ANTICIPATED TO BE REQUIRED AS NOTED IN THE PLANS. ADDITIONAL AREAS MAY BE REQUIRED, A.O.B.E. AND PAID FOR UNDER RESPECTIVE ITEMS.

ENVIRONMENTAL PERMITS

A CONSTRUCTION BEST MANAGEMENT PRACTICES PLAN (CBMPP) AND ASSOCIATED EROSION PREVENTION AND SEDIMENT CONTROL (EPPSC) PLANS WERE NOT DEVELOPED AS A PART OF THIS CONTRACT AND SHOULD BE DEVELOPED BY A QUALIFIED DESIGN PROFESSIONAL PRIOR TO ANY LAND DISTURBANCE ASSOCIATED WITH THIS PROJECT.

THE CONTRACTOR SHALL COMPLY WITH ALL ENVIRONMENTAL REQUIREMENTS AND SPECIAL CONDITIONS CONTAINED IN THE PERMITS ISSUED FOR THE PROJECT AND PROVIDED IN THE CONSTRUCTION DOCUMENTS.

TREATED TIMBER AND LUMBER

DUE TO HEALTH CONCERNS ON THE USE OF CHROMIATED COPPER ARSENATE (CCA) AS A WOOD PRESERVATIVE, LUMBER TREATED WITH CCA CANNOT BE USED ON THIS PROJECT.

CLEARING NOTES

CONTRACTOR SHALL ABIDE BY ALL CUTTING RESTRICTIONS AS CONTAINED IN THE PLANS AND A.O.B.E.

THE PLANS SHOW THE DESIRED LOCATION OF THE PROPOSED TRAIL TO BE CONSTRUCTED. THE CONTRACTOR SHALL LAYOUT THE PROPOSED ALIGNMENT AS SHOWN IN THE CONTRACT PLANS. THE CLEARING LIMITS HAVE BEEN DEFINED IN RELATION TO THE PROPOSED ALIGNMENT AND SHALL BE VERIFIED BY THE CITY OF SHEFFIELD ENGINEER PRIOR TO COMMENCEMENT OF ANY CLEARING.

THIS CONTRACT INCLUDES TREE AND BRUSH CUTTING WITHIN THE LIMITS SHOWN ON THE PLANS. THE TREES AND BRUSH SHALL BE CUT APPROXIMATELY 6" TO 12" ABOVE GRADE IN ACCORDANCE WITH THE FOLLOWING:

EMBANKMENT - REMOVE STUMPS

SHOULDER - GROUND OR REMOVE

OUTSIDE SHOULDER - MAY BE REMOVED, GROUND, OR CUT FLUSH

ANY DEAD, DYING OR DISEASED TREES, WITHIN THE PROJECT LIMITS, REGARDLESS OF SIZE OR TYPE, SHALL BE REMOVED TO A MANNER AS DIRECTED BY THE CITY OF SHEFFIELD ENGINEER.

ALL STUMPS WITHIN THE PROPOSED EDGE OF TRAIL BED SHALL BE REMOVED. STUMPS LOCATED BETWEEN THE EDGE OF THE TRAIL BED AND THE EDGE OF THE AREA TO BE CLEARED AND GRUBBED THAT CANNOT BE CUT FLUSH WITHIN THE FINISHED SLOPE, OR ARE NOT TIGHTLY ROOTED, SHALL BE REMOVED.

THIS CONTRACT SHALL INCLUDE CLEARING AND REMOVAL OF ANY REMAINING BRUSH AND TREES NECESSARY TO CONSTRUCT THE TRAIL, AND CLEAR THE CORRIDOR AS DEFINED IN THE DRAWINGS.

PROJECT NO. 2021-042
DESIGNED BY: [blank]
DRAWN BY: CFW
REVIEWED BY: [blank]
DATE: 10.29.2021
SCALE: [blank]

DATE: 10.29.2021
SCALE: [blank]



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NOT FOR CONSTRUCTION

TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

SHEET TITLE

SHEET NO.

GENERAL NOTES

CG002

SHEET 2 of 25

PROJECT PERMITS

1 FINAL PROJECT PERMITTING AND SEQUENCING COORDINATION SITE PERMITS/ENVIRONMENTAL PERMITS

GENERAL CONTRACTOR TO PROVIDE ENGINEER WITH ALL CONTRACTOR AND SUBCONTRACTOR CONTACT, LICENSE, AND OTHER INFORMATION THAT IS REQUIRED TO BE SUBMITTED TO CITY OF SHEFFIELD IN ORDER TO OBTAIN THE PROJECT'S SITE PERMITS. CONTRACTOR TO FILL OUT THE SITE PERMIT APPLICATION WITH CONTRACTOR, SUBCONTRACTOR AND OTHER INFORMATION AS REQUIRED, SIGN THE PERMIT APPLICATION, AND HAVE SITE SUBCONTRACTOR SIGN THE APPLICATION.

CONTRACTOR SHALL PROVIDE THE COMPLETED PERMIT APPLICATION TO THE ENGINEER AS WELL AS ANY OTHER INFORMATION NECESSARY FOR OBTAINING THE PERMIT, INCLUDING BUT NOT LIMITED TO CERTIFICATE OF INSURANCE IN THE AMOUNT OF THE CONTRACT LIMITS.

2. TREE PROTECTION AND REMOVAL.
EXISTING TREES 3 INCH DBH OR LARGER ARE TO BE PRESERVED OR REMOVED AS REQUIRED BY CITY OF SHEFFIELD AUTHORITY. ALL EXISTING TREES LESS THAN 3 INCH DBH WITHIN THE PLANNED LIMIT OF DISTURBANCE MAY BE REMOVED FOLLOWING THE NOTICE TO PROCEED. GENERAL CONTRACTOR TO INSTALL ANY REQUIRED TREE PROTECTION FENCING AND COORDINATE INSPECTION AND APPROVAL WITH THE CITY OF SHEFFIELD AND OTHER AUTHORITIES.

3 BUILDING PERMITS

GENERAL CONTRACTOR TO PROVIDE ENGINEER WITH ALL CONTRACTOR AND SUBCONTRACTOR CONTACT, LICENSE, AND OTHER INFORMATION THAT IS REQUIRED TO BE SUBMITTED TO CITY OF SHEFFIELD IN ORDER TO OBTAIN THE PROJECT'S BUILDING PERMITS. CONTRACTOR TO FILL OUT THE BUILDING PERMIT APPLICATION WITH CONTRACTOR, SUBCONTRACTOR, AND OTHER INFORMATION AS REQUIRED, SIGN THE PERMIT APPLICATION, AND HAVE ALL TRADE SUBCONTRACTORS SIGN THE APPLICATION. CONTRACTOR SHALL PROVIDE THE COMPLETED PERMIT APPLICATION TO THE ENGINEER AND ANY OTHER INFORMATION NECESSARY FOR OBTAINING THE PERMIT, INCLUDING BUT NOT LIMITED TO A CERTIFICATE OF INSURANCE IN THE AMOUNT OF THE CONTRACT LIMITS.

4. GENERAL CONTRACTOR TO PICK UP AND PAY FOR BUILDING PERMITS FOLLOWING NOTICE FROM ENGINEER.

5. GENERAL CONTRACTOR CAN BE REIMBURSED FOR THE COST OF SITE AND BUILDING PERMITS AT COST, BASED ON RECEIPTS PROVIDED, FROM THE PERMITTING ALLOWANCE.

ADDITIONAL PERMITTING:

6. GENERAL CONTRACTOR TO COORDINATE DIRECTLY WITH CITY OF SHEFFIELD TO APPLY FOR, SCHEDULE, PAY FOR, AND PICK UP ALL OTHER REQUIRED PROJECT PERMITS, INCLUDING BUT NOT LIMITED TO: TEMPORARY TRAILER PERMIT, FIRE HYDRANT CONSTRUCTION PERMIT, SIGN PERMITS, AND OTHER SUPPLEMENTAL PERMITS.

PROJECT NO: 202-041
DESIGNED BY: [blank]
DRAWN BY: [blank]
DATE: 10/28/2021
SCALE: [blank]

DATE: 10/28/2021
SCALE: [blank]

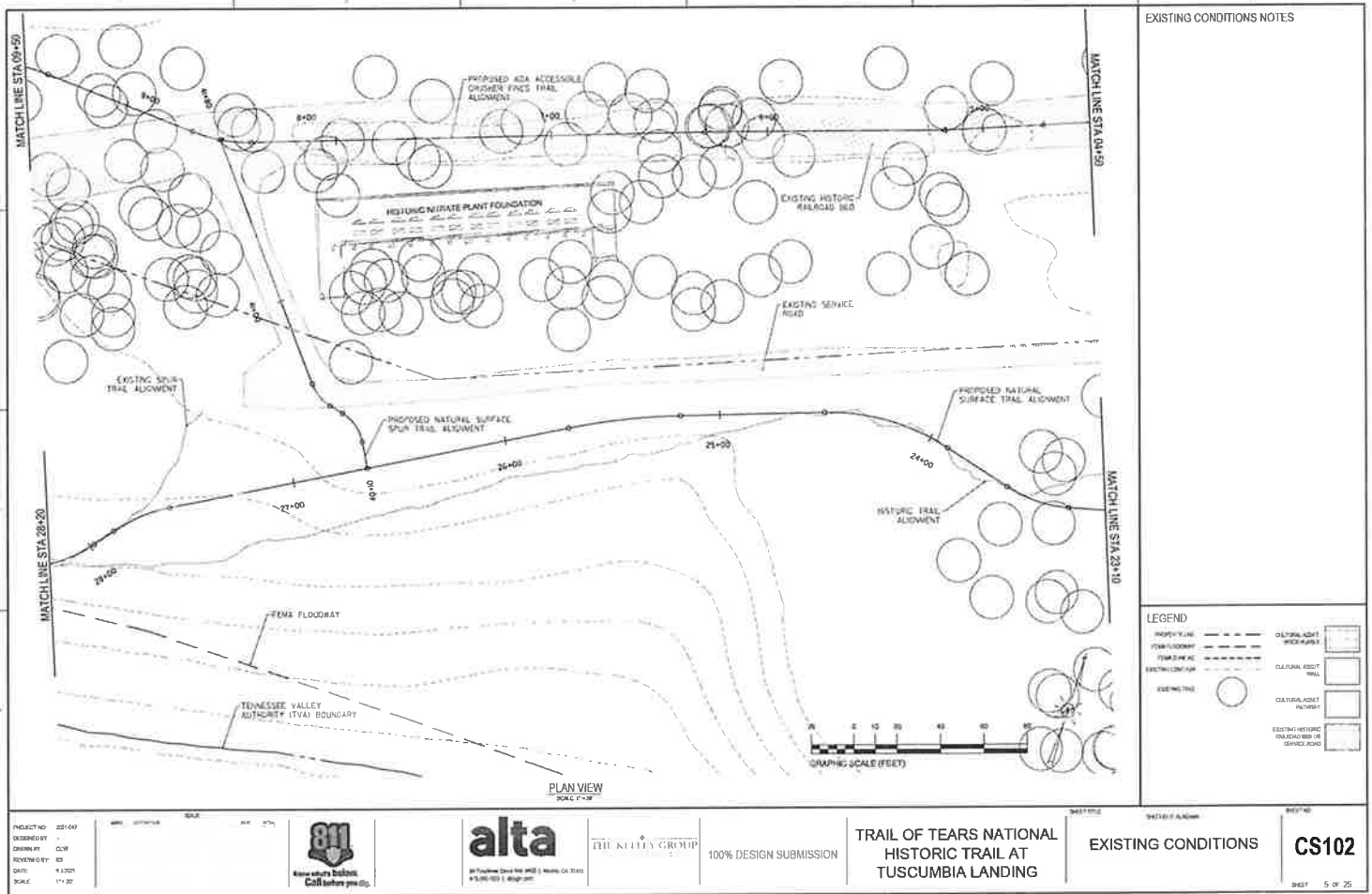


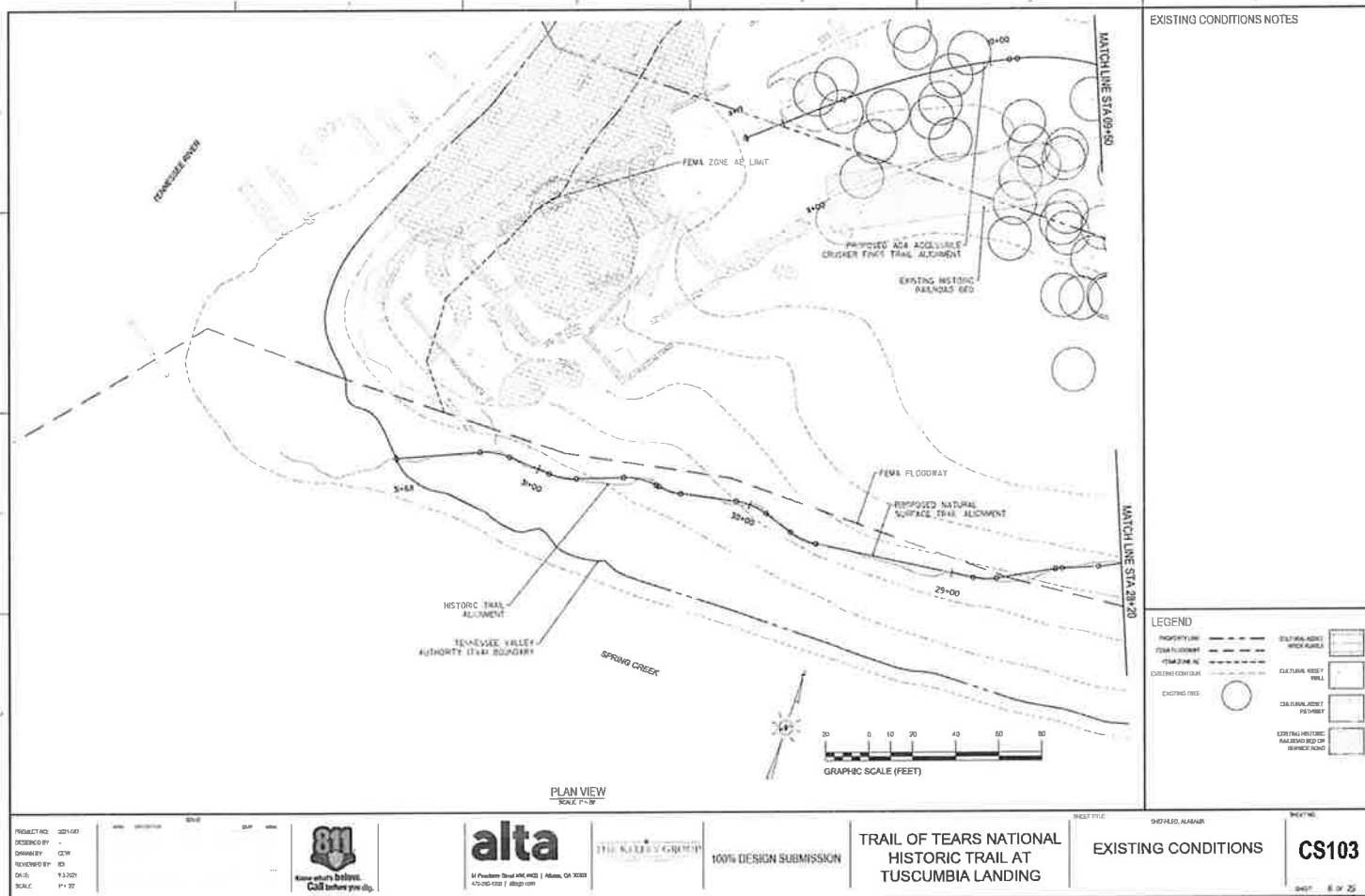
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NOT FOR CONSTRUCTION

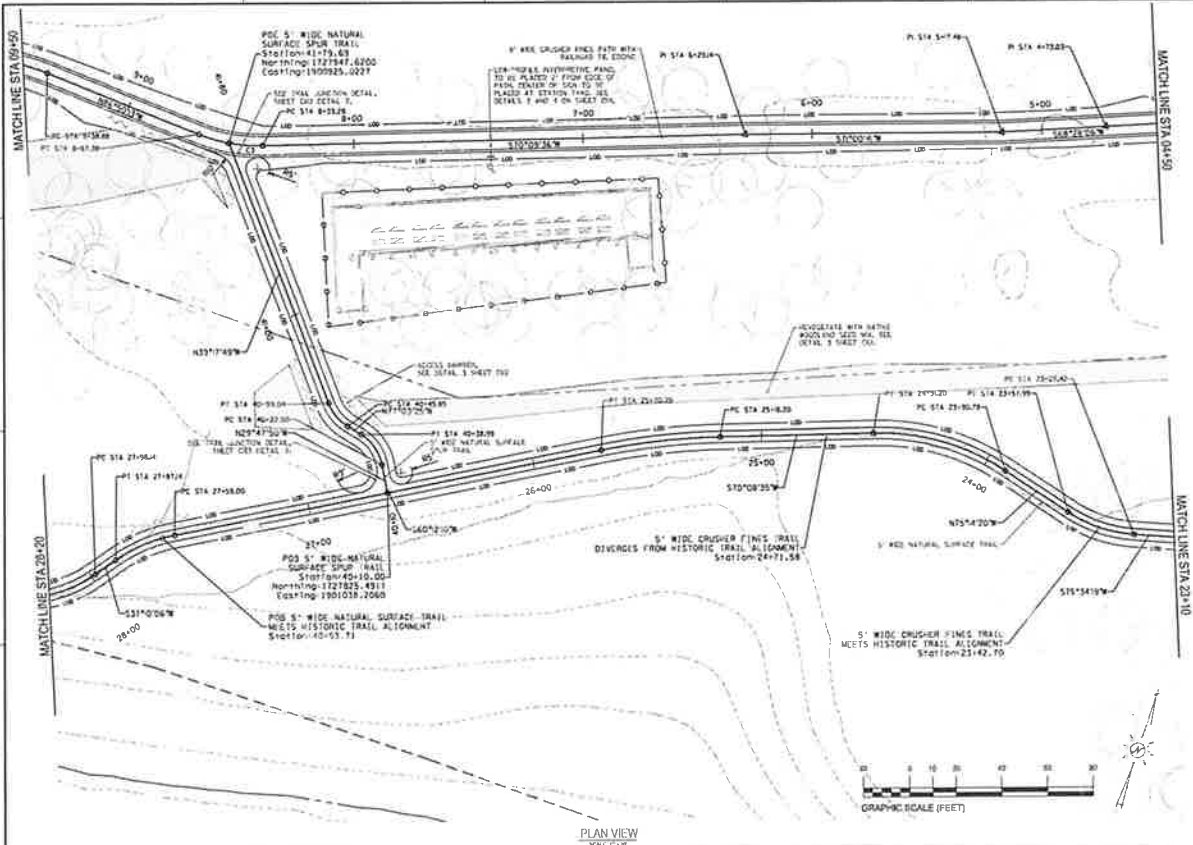
TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

SHEET TITLE: SHEFFIELD, ALABAMA
GENERAL NOTES

SHEET NO.: CG003
SHEET 3 of 25



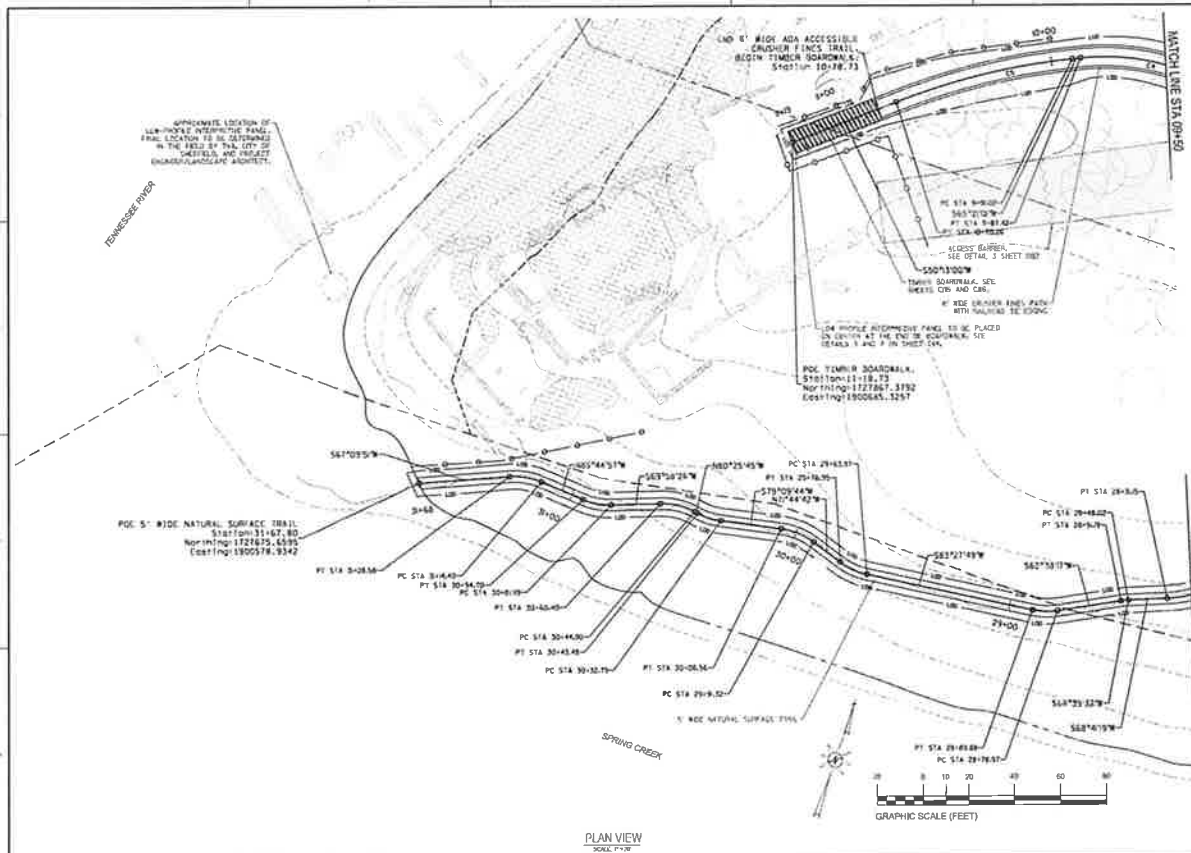




- LAYOUT NOTES**
1. ALL TRAIL ALIGNMENTS TO BE FLAGGED IN FIELD PRIOR TO CONSTRUCTION FOR REVIEW AND APPROVAL BY DNR'S REPRESENTATIVE.
 2. ARCHAEOLOGICAL CONSULTANT TO BE PRESENT DURING BOARDWALK/FOOTER EXCAVATION AND ANY CLEARING OR GRADING OF THE HISTORIC TRAIL TO ENSURE EXISTING RESOURCES ARE PRESERVED.
 3. INSTALLATION OF INTERPRETIVE PANELS ALONG THE 8' WIDE CRUSHER FINES PATH TO MEET ADA STANDARDS.

LEGEND

PROPERTY LINE	CLAYTON ADST. 1/2 AC.
WETLANDS	CLAYTON ADST. 1/2 AC.
PROPOSED TRAIL	CLAYTON ADST. 1/2 AC.
EXISTING TRAIL	CLAYTON ADST. 1/2 AC.
PROPOSED TRAIL	CLAYTON ADST. 1/2 AC.
EXISTING TRAIL	CLAYTON ADST. 1/2 AC.
PROPOSED TRAIL	CLAYTON ADST. 1/2 AC.
EXISTING TRAIL	CLAYTON ADST. 1/2 AC.



LAYOUT NOTES

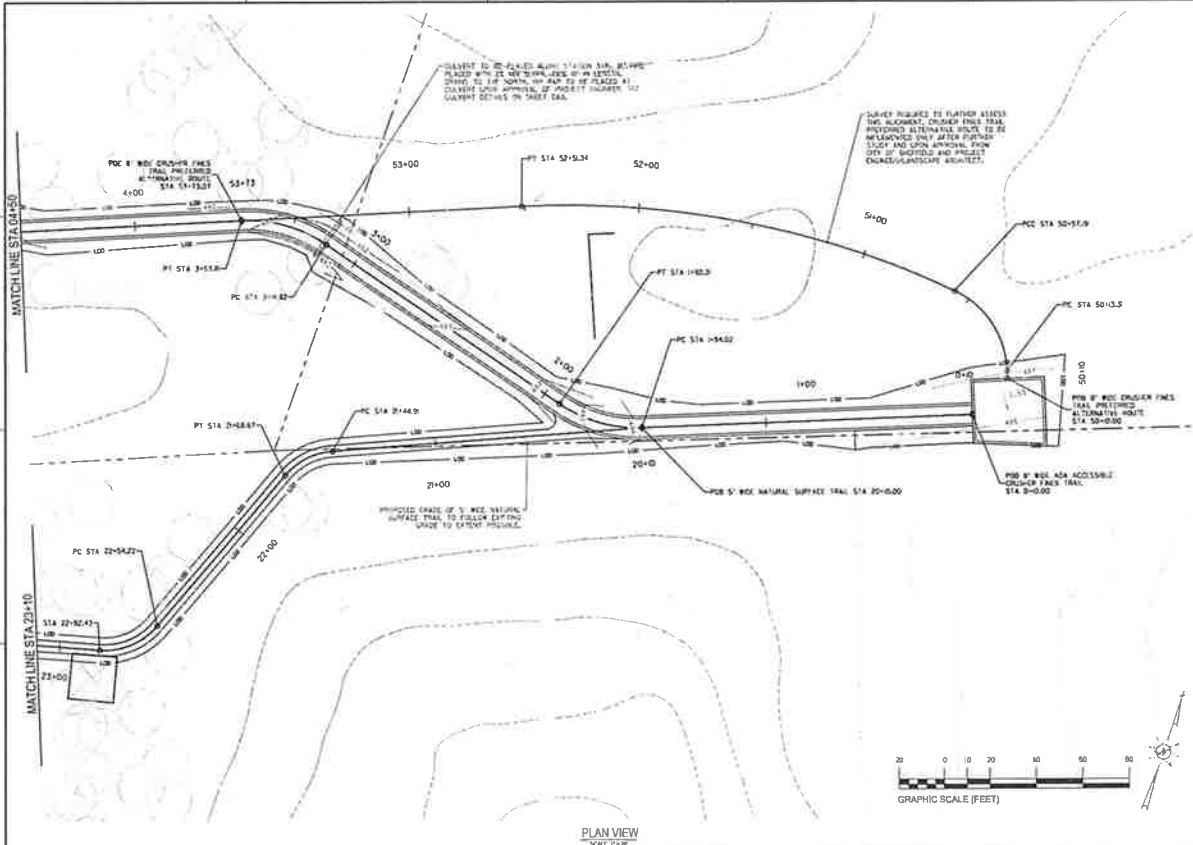
- 1 ALL TRAIL ALIGNMENTS TO BE FLAGGED IN FIELD PRIOR TO CONSTRUCTION FOR REVIEW AND APPROVAL BY OWNERS REPRESENTATIVE.
- 2 AN ARCHAEOLOGY CONSULTANT TO BE PRESENT DURING BOARDWALK/FOOTER EXCAVATION AND ANY CLEARING OR GRADING OF THE HISTORIC TRAIL TO ENSURE EXISTING RESOURCES ARE PRESERVED.
- 3 INSTALLATION OF INTERPRETIVE PANELS ALONG THE 8' WIDE CRUSHER FINES PATH TO MEET ADA STANDARDS.

LEGEND

PROPERTY LINE	CLUTER/ALCOCK
ADJ. TO DISTANCE	CLUTER/ALCOCK
PROTECTION FENCE	CLUTER/ALCOCK
ALCOCK SWEEP	CLUTER/ALCOCK
ROAD JUNCTION	CLUTER/ALCOCK
TRAIL JUNCTION	CLUTER/ALCOCK
EXISTING/NEW	CLUTER/ALCOCK
TO/FROM	CLUTER/ALCOCK

ALIGNMENTS CURVE TABLE				
CURVE #	RADIUS	LENGTH	CHORD DIRECTION	ALIGNMENT
C1	80.000	38.290	S87° 24' 48.37"W	ADA ACCESSIBLE CRUSHED FINES TRAIL
C2	80.000	38.984	S87° 04' 54.78"W	ADA ACCESSIBLE CRUSHED FINES TRAIL
C3	70.000	38.103	S81° 39' 41.44"W	ADA ACCESSIBLE CRUSHED FINES TRAIL
C4	100.000	48.542	S79° 18' 23.15"W	ADA ACCESSIBLE CRUSHED FINES TRAIL
C5	300.000	79.240	S57° 47' 00.28"W	ADA ACCESSIBLE CRUSHED FINES TRAIL
C6	40.000	43.872	N53° 17' 21.38"W	CRUSHED FINES TRAIL, PREFERRED ALTERNATIVE ROUTE
C7	400.000	184.153	S22° 23' 05.53"W	CRUSHED FINES TRAIL, PREFERRED ALTERNATIVE ROUTE

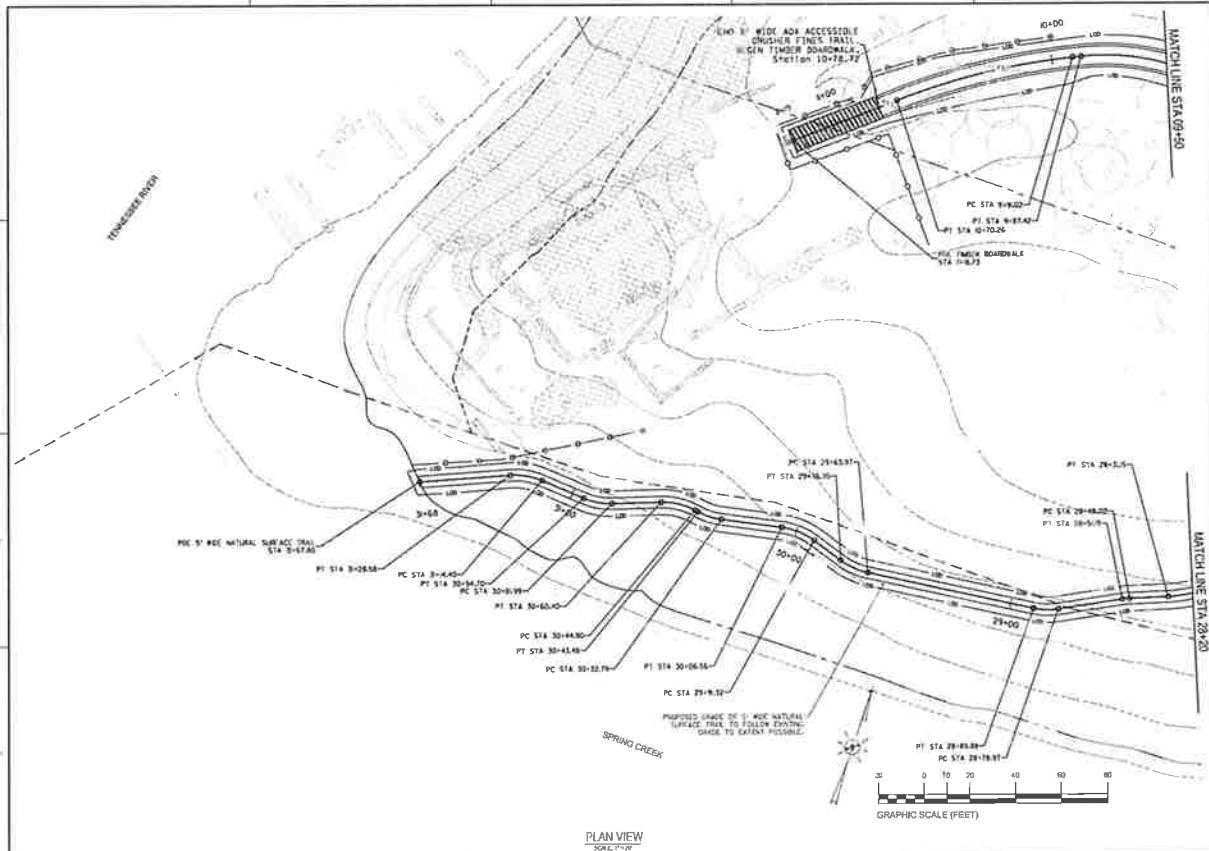
- LAYOUT NOTES
1. ALL TRAIL ALIGNMENTS TO BE FLAGGED IN FIELD PRIOR TO CONSTRUCTION FOR REVIEW AND APPROVAL BY OWNER'S REPRESENTATIVE.
 2. ARCHAEOLOGY CONSULTANT TO BE PRESENT DURING BOARDWALK FOOTER EXCAVATION AND ANY CLEARING OR GRADING OF THE HISTORIC TRAIL TO ENSURE EXISTING RESOURCES ARE PRESERVED.
 3. INSTALLATION OF INTERPRETIVE PANELS ALONG THE 8' WIDE CRUSHED FINES PATH TO MEET ADA STANDARDS.



- GRADING NOTES**
- 1 HAND TOOL GRADING ONLY ON NATURAL SURFACE TRAILS TO MINIMIZE RESOURCE IMPACTS. MAINTAIN 2% CROSS SLOPE TO PROVIDE POSITIVE DRAINAGE. FOLLOWING SLOPE SHALL FOLLOW EXISTING GRADE. PROVIDE ROLLING DRAINAGE DIPS PER SPECIFICATIONS.
 - 2

LEGEND

PROPERTY LINE	CUTLINE ADJUT. PROPOSED
EXISTING CENTERLINE	CUTLINE ADJUT. EXISTING
PROPOSED CENTERLINE	CUTLINE ADJUT. PROPOSED
LINE OF DISCONTINUITY	CUTLINE ADJUT. PROPOSED
PROTECTION FENCE	CUTLINE ADJUT. PROPOSED
PROPOSED EASEMENT	CUTLINE ADJUT. PROPOSED
EXISTING TREE TO REMAIN	

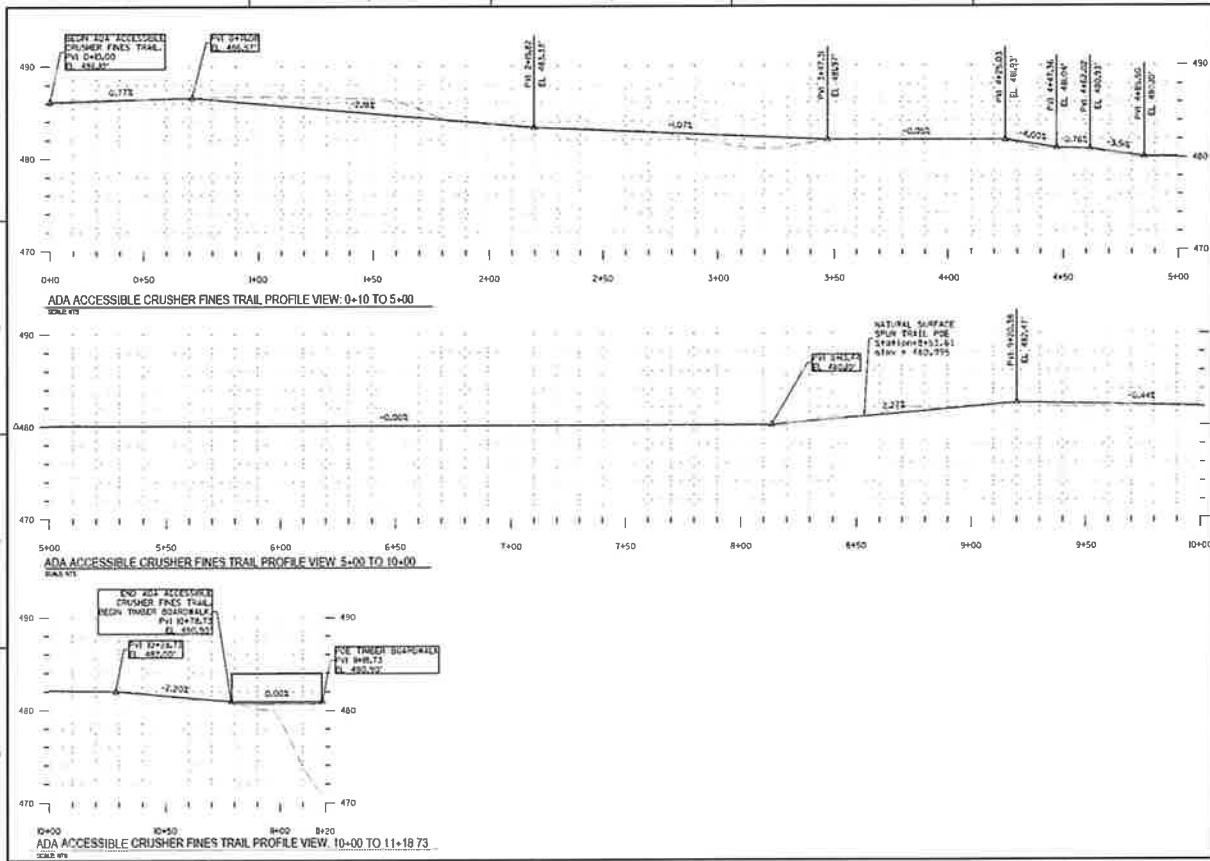


GRADING NOTES

- HAND TOOL GRADING ONLY ON NATURAL SURFACE TRAILS TO MINIMIZE RESOURCE IMPACTS. MAINTAIN 2% CROSS SLOPE TO PROVIDE POSITIVE DRAINAGE. RUNNING SLOPE SHALL FOLLOW EXISTING GRADE.
- PROVIDE ROLLING DRAINAGE DIPS PER SPECIFICATIONS.

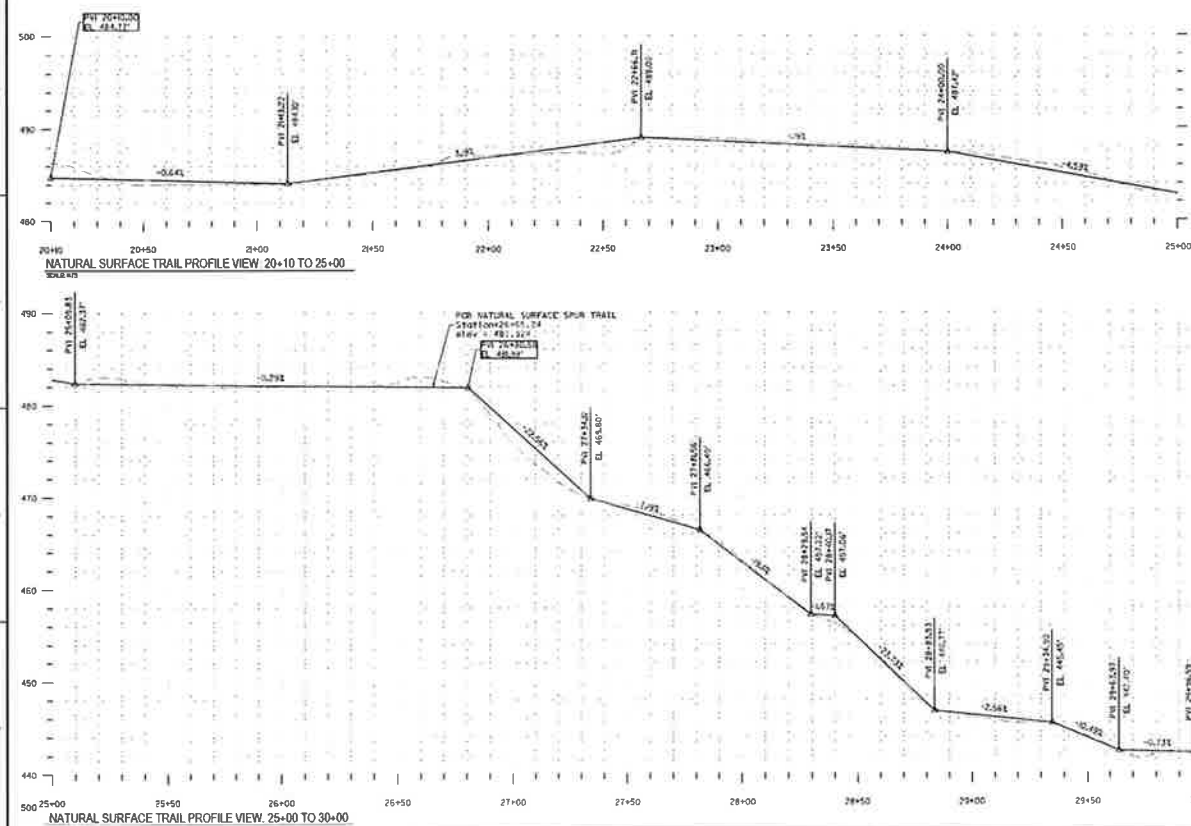
LEGEND

PROPERTY LINE	EXISTING CONTOUR	PROPOSED CIRCULAR	PROPOSED RECTANGULAR	EXISTING ROAD	PROPOSED ROAD
EXISTING TRAIL	PROPOSED TRAIL	EXISTING ADJUTANT GENERAL'S QUARTERS	PROPOSED ADJUTANT GENERAL'S QUARTERS	EXISTING ADJUTANT GENERAL'S QUARTERS	PROPOSED ADJUTANT GENERAL'S QUARTERS

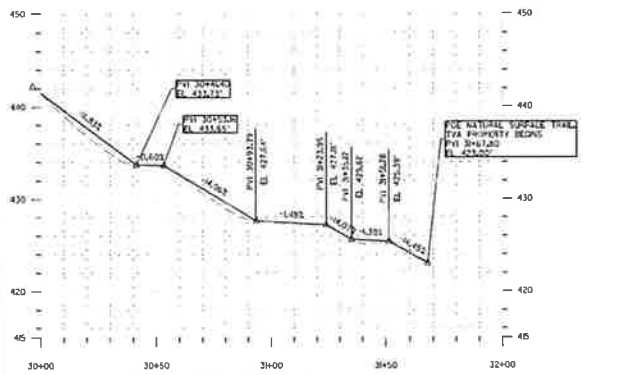


GENERAL NOTES

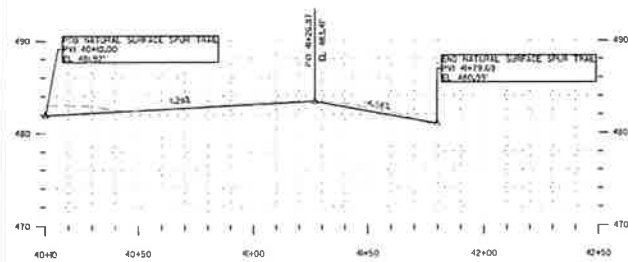
GENERAL NOTES



GENERAL NOTES



NATURAL SURFACE TRAIL PROFILE VIEW 30+00 TO 31+87.80
SCALE: VTS



NATURAL SURFACE SPUR TRAIL PROFILE VIEW 40+10 TO 41+88.35
SCALE: VTS

PROJECT NO. 2021-042
DESIGNED BY: [blank]
DRAWN BY: [blank]
DATE: 10.26.2021
SCALE: VTS



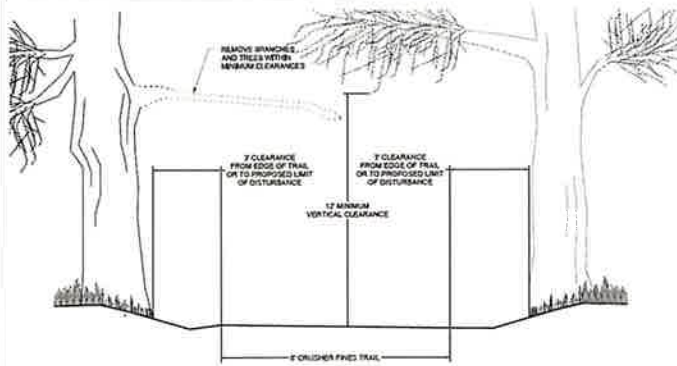
100% DESIGN SUBMISSION

TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

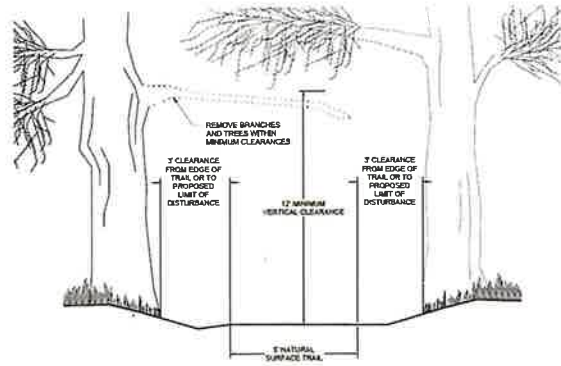
PROFILES

C1110

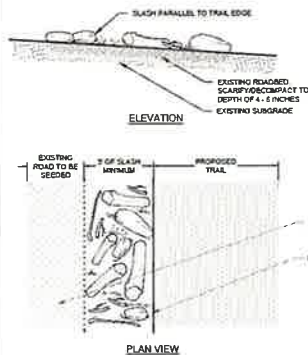
3/4" = 1' 15" OF 25



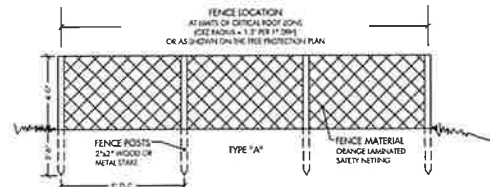
1 8' WIDE TRAIL VEGETATIVE CLEARING AND GRUBBING DETAIL (TYP)



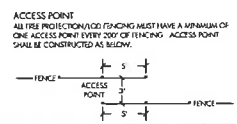
2 5' WIDE TRAIL VEGETATIVE CLEARING AND GRUBBING DETAIL (TYP)



3 ACCESS BARRIER DETAIL (TYP)



- NOTES
1. PROTECTIVE FENCING SHALL BE PLACED ALONG THE LIMIT OF DISTURBANCE AS WELL AS IDENTIFIED ELSEWHERE ON THE PLANS.
 2. ALL PROTECTIVE FENCES ARE TO BE INSTALLED PRIOR TO THE START OF LAND DISTURBANCE AND MAINTAINED UNTIL FINAL LANDSCAPING IS INSTALLED. NO PARKING, STORAGE, OR OTHER CONSTRUCTION SITE ACTIVITIES ARE TO OCCUR WITHIN THE PROTECTED AREA.
 3. PROVIDE 4" DEEP WOOD CHIP MULCH OVER ANY UNPROTECTED TREE ROOT ZONE.
 4. MAKE CLEAN CUTS ON ROOTS EXPOSED BY GRADING AND BACKFILL IMMEDIATELY.
 5. INSTALLATION SHALL INVOLVE NO TRENCHING.



4 LIMIT OF DISTURBANCE/PROTECTIVE FENCE DETAIL

PROJECT NO. 221-042
DESIGNED BY: [blank]
DRAWN BY: [blank]
CHECKED BY: [blank]
DATE: 11.28.2021
SCALE: [blank]

NAME: [blank]
TITLE: [blank]
DATE: [blank]



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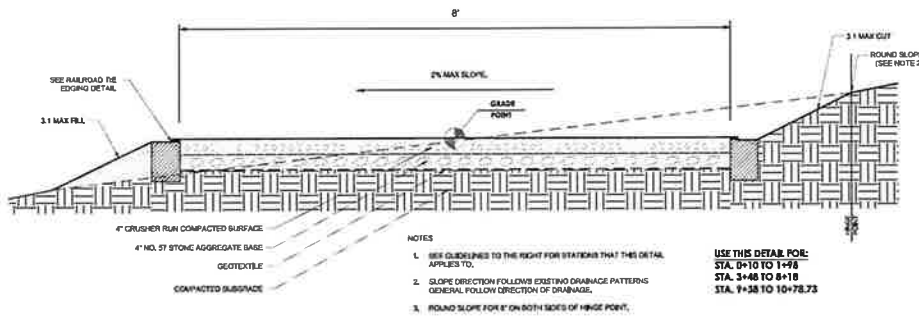
TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

SHEET TITLE: SHEET NUMBER: SHEET NO.

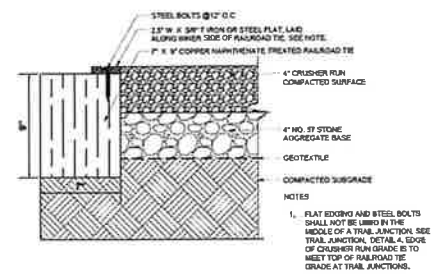
DETAILS

C1111

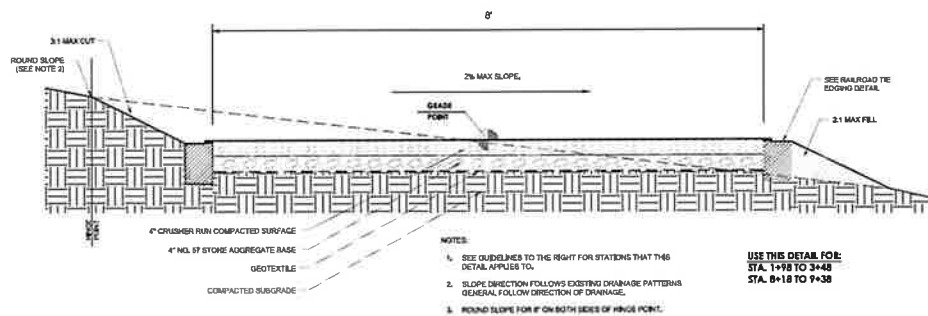
SHEET 25 OF 25



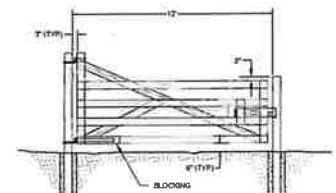
1 CRUSHER FINES TRAIL SECTION - SLOPE TO SOUTH (TYP)



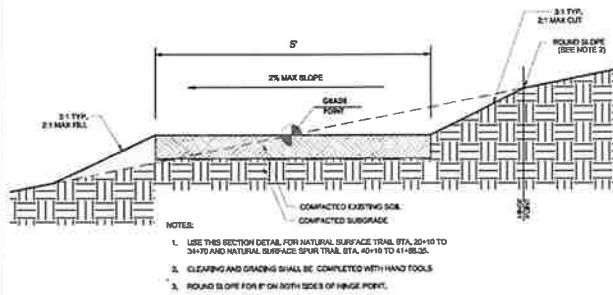
2 RAILROAD TIE EDGING



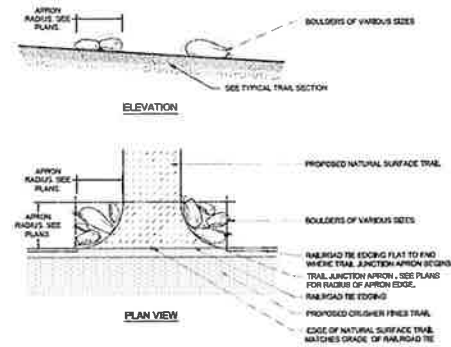
3 CRUSHER FINES TRAIL SECTION - SLOPE TO NORTH (TYP)



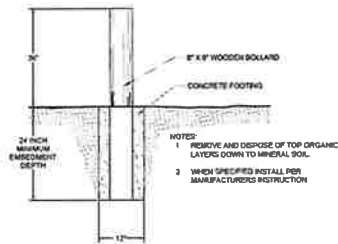
4 WOOD VEHICULAR GATE



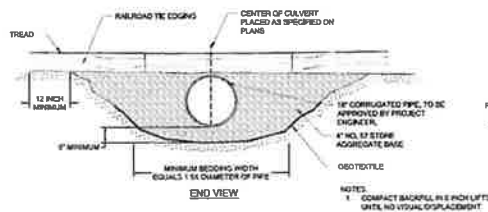
1 NATURAL SURFACE TRAIL SECTION (TYP)



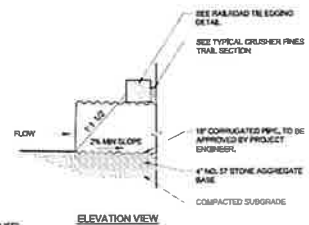
2 TRAIL JUNCTION DETAIL (TYP)



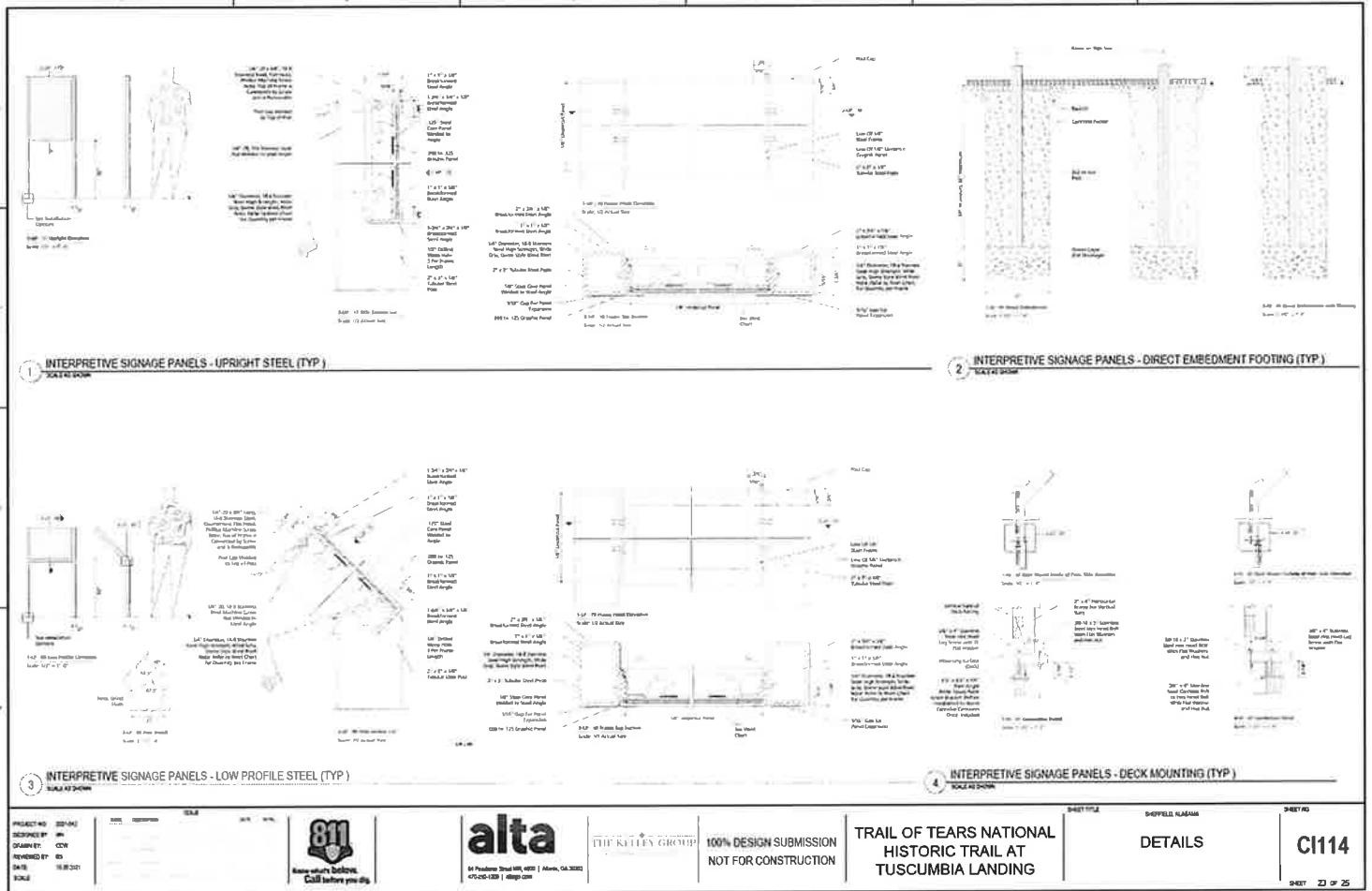
3 BOLLARD DETAIL (TYP)

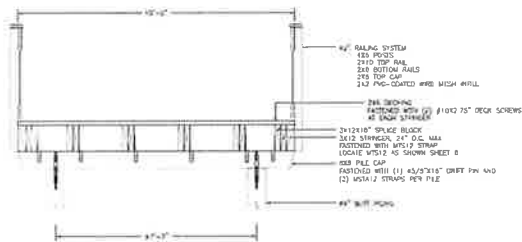


4 CULVERT DETAIL

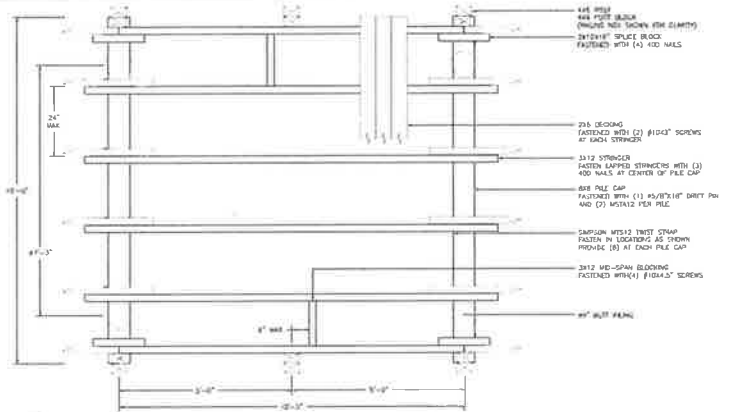


ELEVATION VIEW

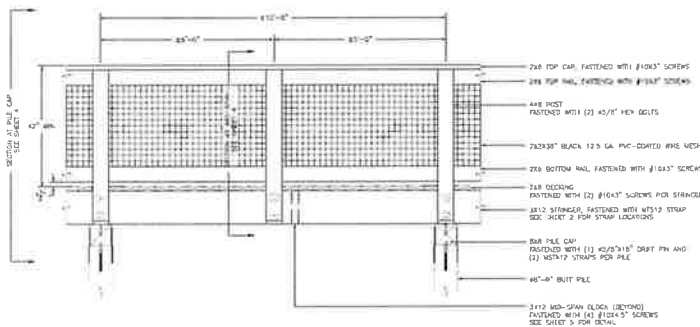




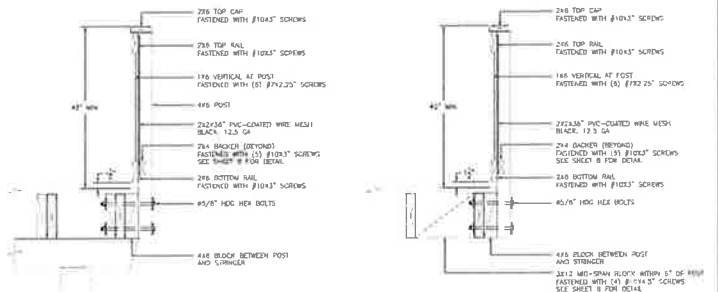
1 TIMBER BOARDWALK SECTION (TYP)
SCALE: 1/4" = 1'-0"



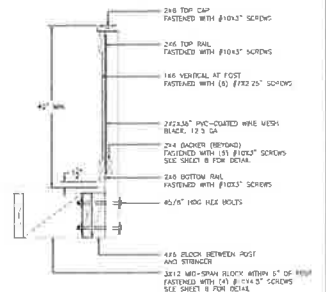
2 TIMBER BOARDWALK PLAN
SCALE: 1/4" = 1'-0"



3 TIMBER BOARDWALK ELEVATION
SCALE: 1/4" = 1'-0"



4 TIMBER BOARDWALK SECTION AT PILE CAP
SCALE: 1/4" = 1'-0"



5 TIMBER BOARDWALK SECTION AT MIDSPAN
SCALE: 1/4" = 1'-0"

PROJECT NO. 201101
DESIGNED BY NH
DRAWN BY CLW
CHECKED BY GJ
DATE 10/20/11
SCALE



alta
61 Peachtree Street NE #200 | Atlanta, GA 30303
404.760.1200 | alta@alta.com



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TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

DETAILS

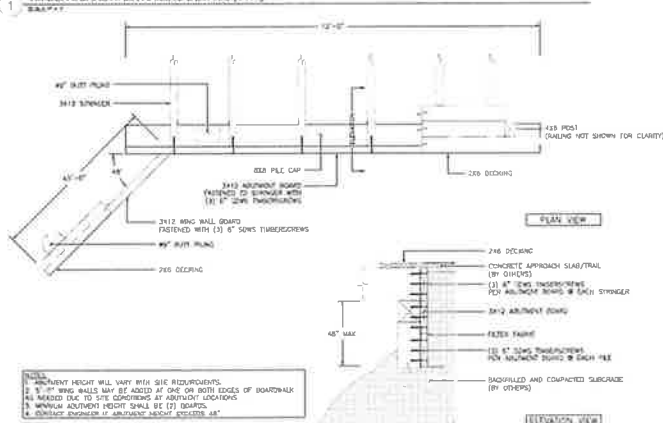
C1115

SHEET 24 OF 25

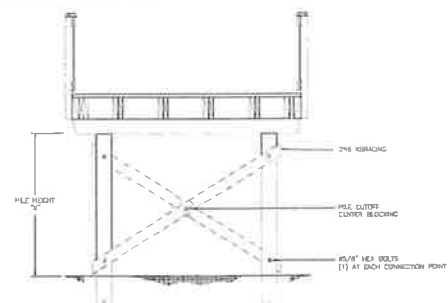
WD-SPAN BLOCK DETAIL

2A4. INCRIDE CONNECTION

TIMBER BOARDWALK RAILING DETAILS (TYP.)



TIMBER BOARDWALK ABUTMENT DETAILS



TIMBER BOARDWALK XBRACE DETAIL (TYP)



PROJECT CONSULTANTS

Alta Planning + Design, Inc.
84 Peachtree St NW
Suite 600
Atlanta, GA 30303
470.290.1200

The Kelley Group
105 W 2nd St
Tusculum, AL 35674
256.248.7030

1. A MINIMUM OF 24 HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF SHEPHERD BUILDING DEPARTMENT AT (256) 368-5066.
2. ALL NEWLY CUT OR FILLED AREAS LACKING ADEQUATE VEGETATION SHALL BE MULCHED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
4. ALL FILL SOILS SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-698) WITHIN 3% OF OPTIMUM MOISTURE CONTENT IN FILL UP TO EXCEED SIX (6) INCHES OF COMPACTED THICKNESS.
5. ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE STATE OF ALABAMA STANDARD CONSTRUCTION SPECIFICATIONS. PROPERTY BOUNDARIES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION, GRADING AND CLEARING, AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
7. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE CITY OF SHEPHERD BUILDING DEPARTMENT OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
8. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SILTATION INTO SURROUNDING HYDROLOGIC FEATURES AND/OR ADJACENT PROPERTIES.
10. EXISTING SITE DATA INCLUDING BUT NOT LIMITED TO LOCATIONS OF EXISTING ROADWAY CULTURAL SITES, AND TREES ARE BASED ON AERIAL PHOTOGRAPHY AND GIS DATA AND SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

<u>SHEET</u>	<u>CONTENT</u>
1	COVER
2-3	GENERAL NOTES
4	PLAN AND PROFILE
5-9	DETAILS

GENERAL NOTES

1. ALABAMA STATE DEPARTMENT OF TRANSPORTATION MATERIAL AND CONSTRUCTION SPECIFICATIONS SHALL BE IN EFFECT FOR THIS PROJECT.
2. CURRENT NATIONAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE IN EFFECT FOR THIS PROJECT.
3. ADDITIONAL NOTES MAY BE FOUND ON SUBSEQUENT DRAWINGS. SUCH NOTES, WHILE PERTAINING TO THE SPECIFIC DRAWING THEY ARE PLACED ON, ALSO SUPPLEMENT THE GENERAL NOTES LISTED HEREIN.
4. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTION, LIDAR DATA, AND AVAILABLE SURVEY INFORMATION ON FILE WITH THE CITY OF SHEFFIELD. A FIELD SURVEY WAS NOT RUN PRIOR TO THE DEVELOPMENT OF THESE PLANS. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH THE CONDITIONS AND A.O.B.E.
5. THE CONTRACTOR SHALL EXAMINE AND VERIFY IN THE FIELD ALL EXISTING CONDITIONS AND DIMENSIONS WITH THOSE SHOWN ON THE PLANS. THE CONTRACTOR SHALL USE THE FIELD CONDITIONS AND DIMENSIONS, AND NOTE ANY CHANGES TO THOSE SHOWN ON THE PLANS A.O.B.E.. THE RESULTS OF THIS CHECK OF CONDITIONS AND DIMENSIONS SHALL BE SO NOTED ON THE DRAWINGS SUBMITTED FOR APPROVAL.
6. THERE SHALL BE NO CLAIM AGAINST THE CITY OF SHEFFIELD OR THE DESIGN CONSULTANT BY THE CONTRACTOR FOR WORK PERTAINING TO MODIFICATIONS AS MAY BE REQUIRED DUE TO ANY DIFFERENCE BETWEEN ACTUAL FIELD CONDITIONS AND THOSE SHOWN BY THE DETAILS AND DIMENSIONS ON THE CONTRACT PLANS. THE CONTRACTOR WILL BE PAID AT THE UNIT BID PRICE FOR THE ACTUAL QUANTITIES OF MATERIALS USED OR FOR THE WORK PERFORMED, AS INDICATED BY THE VARIOUS ITEMS IN THE CONTRACT.
7. AT ALL TIMES, THE CONTRACTOR SHALL TAKE MEASURES TO PROVIDE POSITIVE DRAINAGE OF SURFACE RUNOFF FROM THE WORK SITE AND CONTROL OF THE RUNOFF TO PREVENT EROSION, POLLUTION, SEDIMENTATION OR OTHER DISCHARGES WHICH WOULD AFFECT PROPERTIES ADJACENT TO THE WORK SITE. ALL MEASURES TAKEN TO PROVIDE POSITIVE DRAINAGE SHALL BE APPROVED BY THE CITY OF SHEFFIELD PRIOR TO CONSTRUCTION. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.
8. THE CONTRACTOR SHOULD NOTE THAT ADDITIONAL WORK MAY BE REQUIRED AS THE CONTRACT PROGRESSES WHICH IS NOT SHOWN OR NOTED ON THE PLANS. THIS WORK SHALL BE PERFORMED BY THE CONTRACTOR A.O.B.E. AND PAYMENT SHALL BE MADE AT THE BID PRICE FOR THE APPROPRIATE ITEMS.
9. THE CLEARING AND GRUBBING ITEM SHALL CONSIST OF THE REMOVAL OF THE BRUSH AND TREE STUMPS WITHIN THE PROJECT LIMITS WHERE INDICATED ON THE PLANS AND A.O.B.E. IN ADDITION, TREE BRANCHES OVERHANGING THE EDGE OF THE PROPOSED TRAIL LIMITS SHALL BE TRIMMED BACK TO PROVIDE A 120 FOOT VERTICAL CLEARANCE. CONTRACTOR MAY NOT BURY STUMPS. NO SEPARATE PAYMENT SHALL BE MADE FOR WORK CALLED FOR BY NOTED ON THE PLANS. IN THE SPECIFICATIONS, OR UNDER THE HEADING GENERAL NOTES UNLESS PAYMENT IS SPECIFICALLY INDICATED BY ITEM NUMBER. THE COST OF WORK FOR WHICH NO SEPARATE PAYMENT IS INDICATED SHALL BE INCLUDED IN THE

11. UNIT PRICES BID FOR THE VARIOUS ITEMS IN THE CONTRACT. WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE PRICE BID FOR THOSE ITEMS.
12. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORTS, BRACING OR OTHER DEVICES THAT MAY BE REQUIRED OR THAT MAY BE DIRECTED BY THE ENGINEER TO PROTECT THE SAFETY OF ADJACENT STRUCTURES, ROADWAYS OR THE VARIOUS ITEMS IN THE CONTRACT. NO SEPARATE PAYMENT SHALL BE MADE.
13. PAVED AREAS DISTURBED BY THE CONTRACTOR WHICH ARE NOT PART OF THE WORK TO BE PERFORMED UNDER THIS CONTRACT, SHALL BE RESTORED TO AN ACCEPTABLE CONDITION AS SPECIFIED BY AND SATISFACTORY TO THE CITY OF SHEFFIELD ENGINEER.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS.
15. PROVISIONS TO DE-WATER EXCAVATIONS, DUE TO CONSTRUCTION OPERATIONS ALONG THE PROJECT MAY BE REQUIRED. THERE SHALL BE NO SEPARATE PAYMENT FOR ANY DE-WATERING SYSTEMS. COST SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.
16. THE CONTRACTOR SHALL KEEP ALL DRAINAGE FACILITIES WITHIN THE CONTRACT LIMITS, CLEAN AND FULLY OPERATIONAL AT ALL TIMES (A.O.B.E.). THIS WORK SHALL BE INCLUDED UNDER VARIOUS ITEMS IN THE CONTRACT.
17. THE CONTRACTOR SHALL PROVIDE SURVEY AND STAKEOUT.
18. THE CONTRACTOR SHALL BE REQUIRED TO PROTECT THEIR WORKERS AT ALL TIMES IN CONFORMANCE WITH APPLICABLE OSHA REGULATIONS.
19. WATERING NEEDED FOR VEGETATION AND OTHER LANDSCAPING ITEMS SHALL BE INCLUDED UNDER EACH RESPECTIVE ITEM IN THE CONTRACT.
20. DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY.
21. UTILITY NOTES
LOCATION OF UTILITIES, PUBLIC AND/OR PRIVATE, INDICATED ON THE PLANS AS EXISTING AND/OR TO BE CONSTRUCTED ARE APPROXIMATE ONLY. THEIR EXACT LOCATIONS SHALL BE VERIFIED BY A CO-LOCATE SERVICE PRIOR TO CONSTRUCTION COMMENCEMENT. ADDITIONAL UTILITY LINES, WHETHER ABANDONED OR IN SERVICE, MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT OPERATIONS AND TAKE NECESSARY PRECAUTIONS SUCH THAT INTERFERENCE WITH OR DAMAGE TO THESE OR OTHER FACILITIES DURING THE COURSE OF CONSTRUCTION IS PREVENTED. PRIOR TO ANY EXCAVATION, THE CONTRACTOR IS TO CALL ALABAMA 811 TO HAVE UNDERGROUND UTILITIES LOCATED.
23. IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY SERVICE, CAUSING THE INTERRUPTION IN SAID SERVICE, THE CONTRACTOR SHALL IMMEDIATELY COMMENCE WORK TO RESTORE SERVICE AND MAY NOT CEASE WORK UNTIL SERVICE IS RESTORED. ALL COSTS TO REPAIR OR REPLACE DAMAGE UTILITIES SHALL BE AT THE EXPENSE OF THE CONTRACTOR. IF THE CONTRACTOR DOES NOT MAKE IMMEDIATE NECESSARY REPAIRS, THE RESPECTIVE OWNING COMPANIES OR MUNICIPAL FORCES MAY

24. DO THE WORK, AND THE COST THEREOF, CHARGED AGAINST THE CONTRACTOR.
25. THE CONTRACTOR SHALL MAKE EXPLORATIONS IF NECESSARY A.O.B.E. TO DETERMINE THE DIMENSIONS AND LOCATIONS OF LINES THAT MAY BE SUBJECT TO DAMAGE.
26. THE CONTRACTOR SHALL PROTECT ALL UNDERGROUND UTILITIES TO REMAIN IN PLACE FROM DAMAGE DURING THE CONSTRUCTION. METHODS OF PROTECTION MAY INCLUDE STEEL PLATES OVER THE UTILITY SO THAT WHEEL LOADINGS FROM CONSTRUCTION VEHICLES DO NOT DAMAGE THE UTILITY.
28. DAMAGE TO EXISTING STRUCTURES;
VEGETATION/SHRUBS; OR OTHER AMENITIES
NUMEROUS STRUCTURES AND VEGETATION/SHRUBS ARE PRESENT WITHIN THE WORK LIMITS AND ARE TO REMAIN UNDISTURBED. THE CONTRACTOR SHALL TAKE EXTRA PRECAUTIONS TO PROTECT THESE ITEMS. ALL DAMAGE TO THE EXISTING STRUCTURES OR MATERIALS WHICH ARE NOT PART OF THE INTENDED WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR WITHOUT COST TO THE OWNER AND TO THE SATISFACTION OF THE CITY OF SHEFFIELD ENGINEER.
29. MAINTENANCE JURISDICTION
UPON COMPLETION OF THE PROJECT, THE TRAIL, INCLUDING BRIDGES AND DRAINAGE, WILL BE MAINTAINED BY CITY OF SHEFFIELD.
30. RIGHT-OF-WAY NOTES
THE CONTRACTOR IS TO CONFINED ALL WORK IS BEING PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY (ROW) OR ON CITY-OWNED PROPERTY, INCLUDING BUT NOT LIMITED TO VEHICLE ACCESS, STORAGE OF EQUIPMENT, MATERIALS, DEBRIS AND WASTE, LANDSCAPING, VEGETATION REMOVAL AND MANAGEMENT, GRADING, SEEDING AND THE INSTALLATION OF TURF AND THE INSTALLATION OF ANY FENCES OR PROTECTIVE BARRIER UNLESS SPECIFIC AGREEMENTS ARE MADE BETWEEN THE CONTRACTOR AND LANDOWNER PERMITTING SUCH ACTIVITIES.
31. IF THE CONTRACTOR IS UNABLE TO IDENTIFY THE LIMITS OF THE RIGHTS-OF-WAY WHEN THE CONTRACT CALLS FOR WORK IN THOSE VICINITIES, THE CONTRACTOR MUST CONTACT THE PROJECT ENGINEER FOR DEFINITIVE BOUNDARY DETERMINATIONS BEFORE ANY WORK MAY BE INITIATED AT THOSE LOCATIONS.
32. RELEASES FOR ANY NON-ESSENTIAL CONTRACT WORK OUTSIDE OF THE EXISTING RIGHTS-OF-WAY, INCLUDING PLANTINGS, LANDSCAPING OR DRIVEWAY ENHANCEMENT, ARE PROVIDED BY THE CITY OF SHEFFIELD AND IN NO INSTANCE ARE TO BE SECURED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT INVADE UPON PRIVATE PROPERTIES, LANDS OR BUILDINGS OUTSIDE OF THE RIGHTS-OF-WAY FOR ANY REASON WITHOUT FIRST SECURING WRITTEN PERMISSION FROM THE PROPERTY OWNER. THE CONTRACTOR WILL BE HELD LIABLE FOR ANY DAMAGES DONE TO PRIVATE PROPERTY. ANY SUCH INJURIES OR DAMAGES SHALL

33. BE SATISFACTORILY REPAIRED OR ITEMS REPLACED AT THE CONTRACTOR'S EXPENSE.
34. EXCAVATION NOTES
ASSUME ALL EXCAVATED MATERIAL IS NOT SUITABLE FOR EMBANKMENT CONSTRUCTION.
SUBGRADE IMPROVEMENTS ARE ANTICIPATED TO BE REQUIRED AS NOTED IN THE PLANS. ADDITIONAL AREAS MAY BE REQUIRED. A.O.B.E. AND PAID FOR UNDER RESPECTIVE ITEMS.
1. ENVIRONMENTAL PERMITS
A CONSTRUCTION BEST MANAGEMENT PRACTICES PLAN (CBMPP) AND ASSOCIATED EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLANS WERE NOT DEVELOPED AS A PART OF THIS CONTRACT AND SHOULD BE DEVELOPED BY A QUALIFIED DESIGN PROFESSIONAL PRIOR TO ANY LAND DISTURBANCE ASSOCIATED WITH THIS PROJECT.
THE CONTRACTOR SHALL COMPLY WITH ALL ENVIRONMENTAL REQUIREMENTS AND SPECIAL CONDITIONS CONTAINED IN THE PERMITS ISSUED FOR THE PROJECT AND PROVIDED IN THE CONSTRUCTION DOCUMENTS.
2. TREATED TIMBER AND LUMBER
DUE TO HEALTH CONCERNS ON THE USE OF CHROMIATED COPPER ARSENATE (CCA) AS A WOOD PRESERVATIVE, LUMBER TREATED WITH CCA CANNOT BE USED ON THIS PROJECT.
3. CLEARING NOTES
CONTRACTOR SHALL ABIDE BY ALL CUTTING RESTRICTIONS AS CONTAINED IN THE PLANS AND A.O.B.E..
THE PLANS SHOW THE DESIRED LOCATION OF THE PROPOSED TRAIL TO BE CONSTRUCTED. THE CONTRACTOR SHALL LAYOUT THE PROPOSED ALIGNMENT AS SHOWN IN THE CONTRACT PLANS. THE CLEARING LIMITS HAVE BEEN DEFINED IN RELATION TO THE PROPOSED ALIGNMENT AND SHALL BE VERIFIED BY THE CITY OF SHEFFIELD ENGINEER PRIOR TO COMMENCEMENT OF ANY CLEARING.
THIS CONTRACT INCLUDES TREE AND BRUSH CUTTING WITHIN THE LIMITS SHOWN ON THE PLANS. THE TREES AND BRUSH SHALL BE CUT APPROXIMATELY 6" TO 12" ABOVE GRADE IN ACCORDANCE WITH THE FOLLOWING:
EMBANKMENT = REMOVE STUMPS
SHOULDER = GROUND OR REMOVE
OUTSIDE SHOULDER = MAY BE REMOVED, GROUND, OR CUT FLUSH
ANY DEAD, DYING OR DISEASED TREES, WITHIN THE PROJECT LIMITS, REGARDLESS OF SIZE OR TYPE, SHALL BE REMOVED TO A MANNER AS DIRECTED BY THE CITY OF SHEFFIELD ENGINEER.
ALL STUMPS WITHIN THE PROPOSED EDGE OF TRAILBED SHALL BE REMOVED. STUMPS LOCATED BETWEEN THE EDGE OF THE TRAILBED AND THE EDGE OF THE AREA TO BE CLEARED AND GRUBBED THAT CANNOT BE CUT FLUSH WITHIN THE FINISHED SLOPE, OR ARE NOT TIGHTLY ROOTED, SHALL BE REMOVED.
THIS CONTRACT SHALL INCLUDE CLEARING AND REMOVAL OF ANY REMAINING BRUSH AND TREES NECESSARY TO CONSTRUCT THE TRAIL AND CLEAR THE CORRIDOR AS DEFINED IN THE DRAWINGS.

PROJECT NO. 2023-042
DRAWN BY: [blank]
CHECKED BY: [blank]
REVIEWED BY: [blank]
DATE: 5.2.2021
SCALE: [blank]



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TRAIL OF TEARS
RETRACEMENT TRAIL
AT PARK WEST

GENERAL NOTES

PROJECT PERMITS

1. FINAL PROJECT PERMITTING AND SEQUENCING COORDINATION
SITE PERMIT/ENVIRONMENTAL PERMITS:
GENERAL CONTRACTOR TO PROVIDE ENGINEER WITH ALL
CONTRACTOR AND SUBCONTRACTOR CONTACT, LICENSE, AND
OTHER INFORMATION THAT IS REQUIRED TO BE SUBMITTED TO
CITY OF SHEFFIELD IN ORDER TO OBTAIN THE PROJECT'S SITE
PERMITS. CONTRACTOR TO FILL OUT THE SITE PERMIT
APPLICATION WITH CONTRACTOR, SUBCONTRACTOR AND OTHER
INFORMATION AS REQUIRED. SIGN THE PERMIT APPLICATION, AND
HAVE SITE SUBCONTRACTOR SIGN THE APPLICATION.
CONTRACTOR SHALL PROVIDE THE COMPLETED PERMIT
APPLICATION TO THE ENGINEER AS WELL AS ANY OTHER
INFORMATION NECESSARY FOR OBTAINING THE PERMIT,
INCLUDING BUT NOT LIMITED TO CERTIFICATE OF INSURANCE IN
THE AMOUNT OF THE CONTRACT LIMITS.
2. TREE PROTECTION AND REMOVAL:
EXISTING TREES 3 INCH DBH OR LARGER ARE TO BE PRESERVED
OR REMOVED AS REQUIRED BY CITY OF SHEFFIELD AUTHORITY.
ALL EXISTING TREES LESS THAN 3 INCH DBH WITHIN THE PLAN
LIMIT OF DISTURBANCE MAY BE REMOVED. FOLLOWING THE
NOTICE TO PROCEED, GENERAL CONTRACTOR TO INSTALL ANY
REQUIRED TREE PROTECTION FENCING AND COORDINATE
INSPECTION AND APPROVAL WITH THE CITY OF SHEFFIELD AND
OTHER AUTHORITIES.
3. BUILDING PERMITS:
GENERAL CONTRACTOR TO PROVIDE ENGINEER WITH ALL
CONTRACTOR AND SUBCONTRACTOR CONTACT, LICENSE, AND
OTHER INFORMATION THAT IS REQUIRED TO BE SUBMITTED TO
CITY OF SHEFFIELD IN ORDER TO OBTAIN THE PROJECT'S BUILDING
PERMITS. CONTRACTOR TO FILL OUT THE BUILDING PERMIT
APPLICATION WITH CONTRACTOR, SUBCONTRACTOR, AND OTHER
INFORMATION AS REQUIRED. SIGN THE PERMIT APPLICATION, AND
HAVE ALL TRADE SUBCONTRACTORS SIGN THE APPLICATION.
CONTRACTOR SHALL PROVIDE THE COMPLETED PERMIT
APPLICATION TO THE ENGINEER AND ANY OTHER INFORMATION
NECESSARY FOR OBTAINING THE PERMIT, INCLUDING BUT NOT
LIMITED TO A CERTIFICATE OF INSURANCE IN THE AMOUNT OF THE
CONTRACT LIMITS.
4. GENERAL CONTRACTOR TO PICK UP AND PAY FOR BUILDING
PERMITS FOLLOWING NOTICE FROM ENGINEER.
5. GENERAL CONTRACTOR CAN BE REIMBURSED FOR THE COST OF
SITE AND BUILDING PERMITS AT COST, BASED ON RECEIPTS
PROVIDED, FROM THE PERMITTING ALLOWANCE.
6. ADDITIONAL PERMITTING:
GENERAL CONTRACTOR TO COORDINATE DIRECTLY WITH CITY OF
SHEFFIELD TO APPLY FOR, SCHEDULE, PAY FOR, AND PICK UP ALL
OTHER REQUIRED PROJECT PERMITS, INCLUDING, BUT NOT
LIMITED TO: TEMPORARY TRAILER PERMIT, FIRE HYDRANT
CONSTRUCTION PERMIT, SIGN PERMITS, AND OTHER
SUPPLEMENTAL PERMITS.

PROJECT NO: 201-042
DESIGNED BY: JRM
DRAWN BY: JRM
REVISIONS BY: SS
DATE: 5.3.201
SCALE:

DATE: 5.3.201



THE KFFLEY GROUP

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NOT FOR CONSTRUCTION

TRAIL OF TEARS
RETRACEMENT TRAIL
AT PARK WEST

GENERAL NOTES

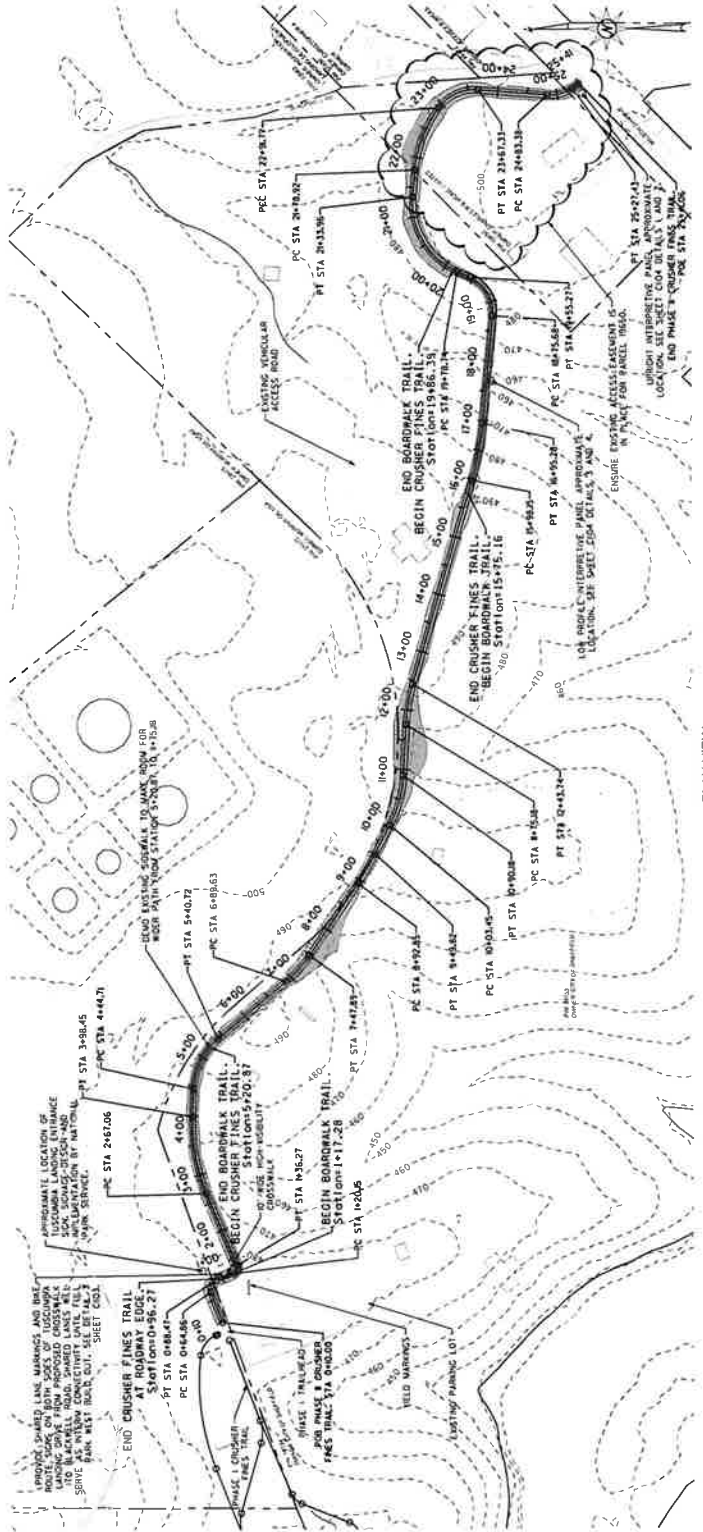
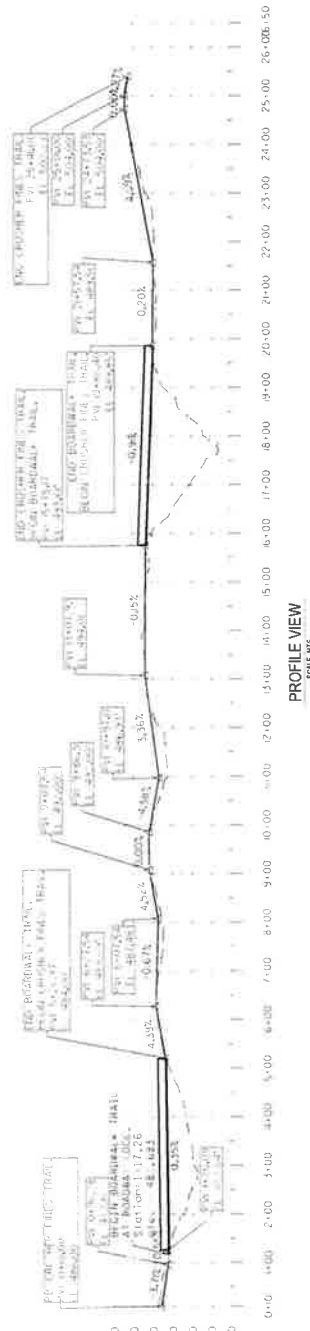
SHEET TITLE SHEET NO

CG003

SHEET 3 OF 9

NOTES

1. EXISTING SITE DATA INCLUDING BUT NOT LIMITED TO LOCATIONS OF EXISTING ROADWAY, STRUCTURES, PARKING LOTS, AND BUILDINGS ARE BASED ON AERIAL PHOTOGRAPHY AND GIS DATA AND SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.



LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- EXISTING ROADWAY
- EXISTING EASEMENT
- EXISTING STRUCTURE
- EXISTING UTILITY
- EXISTING TRAIL

PROJECT NO. 2021-042

DESIGNED BY WH

DRAWN BY CCW

REVIEWED BY BS

DATE 9.13.2021

SCALE

80

Know what's below.
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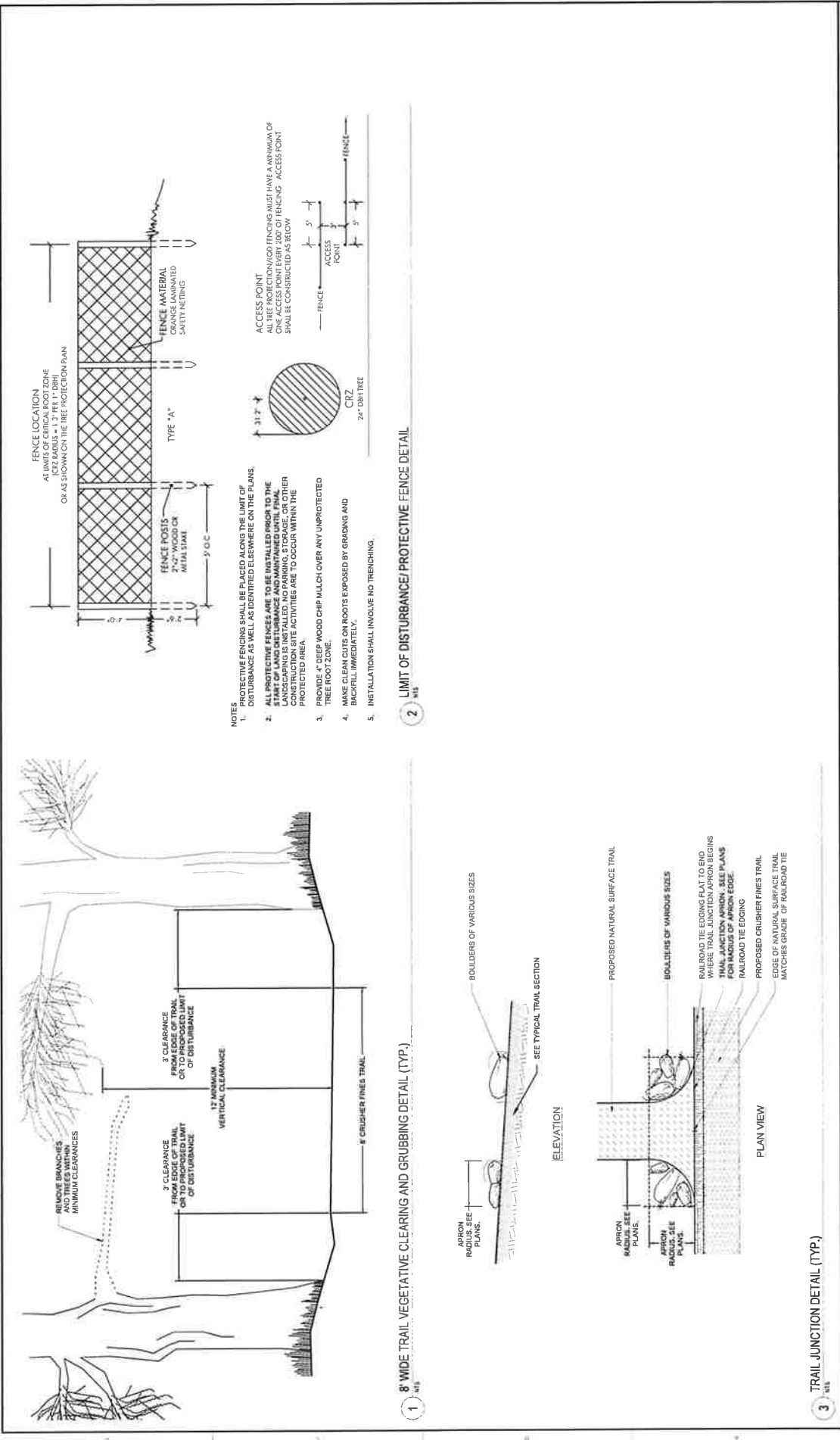
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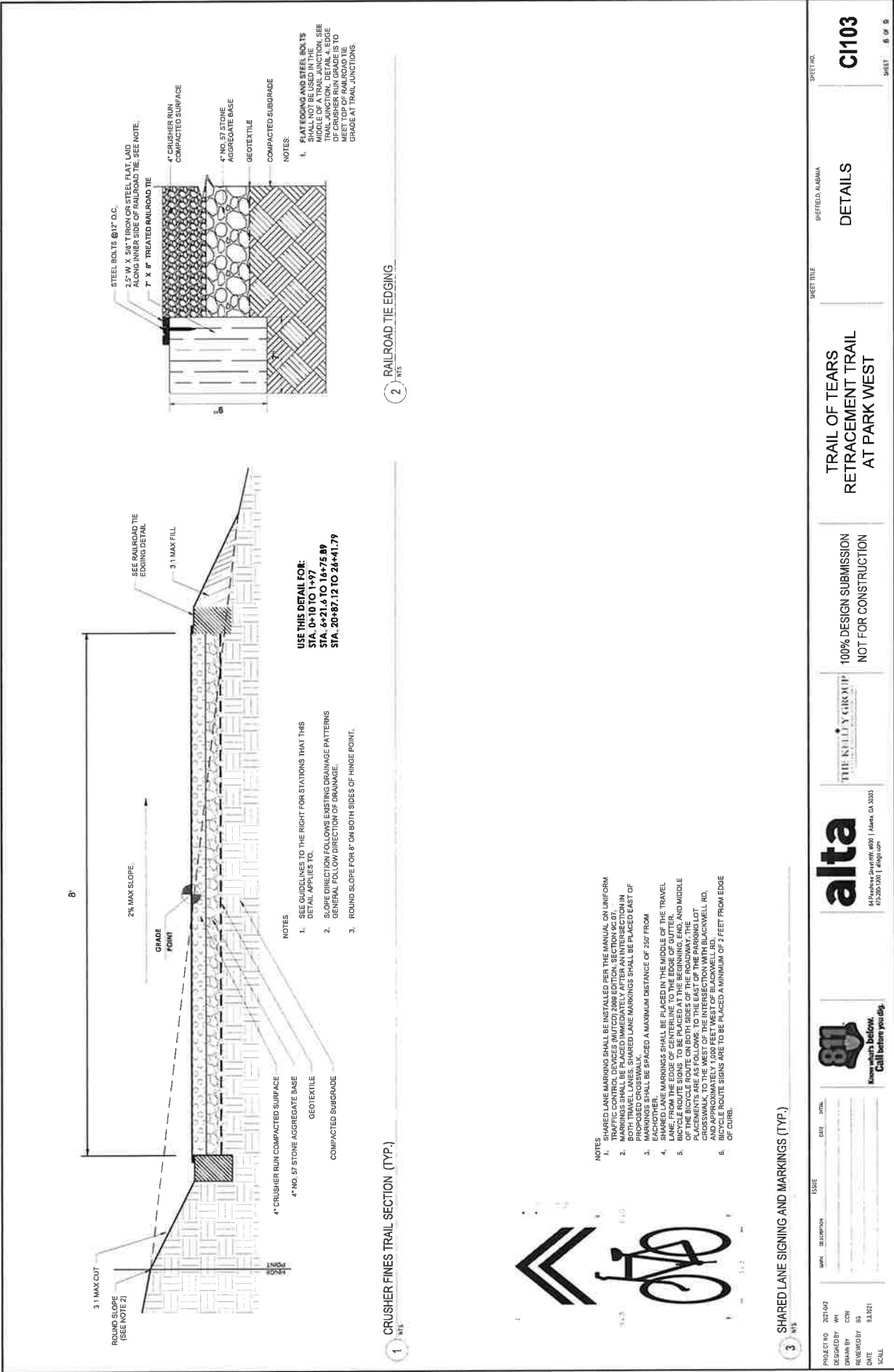
TRAIL OF TEARS
RETRACEMENT TRAIL
AT PARK WEST

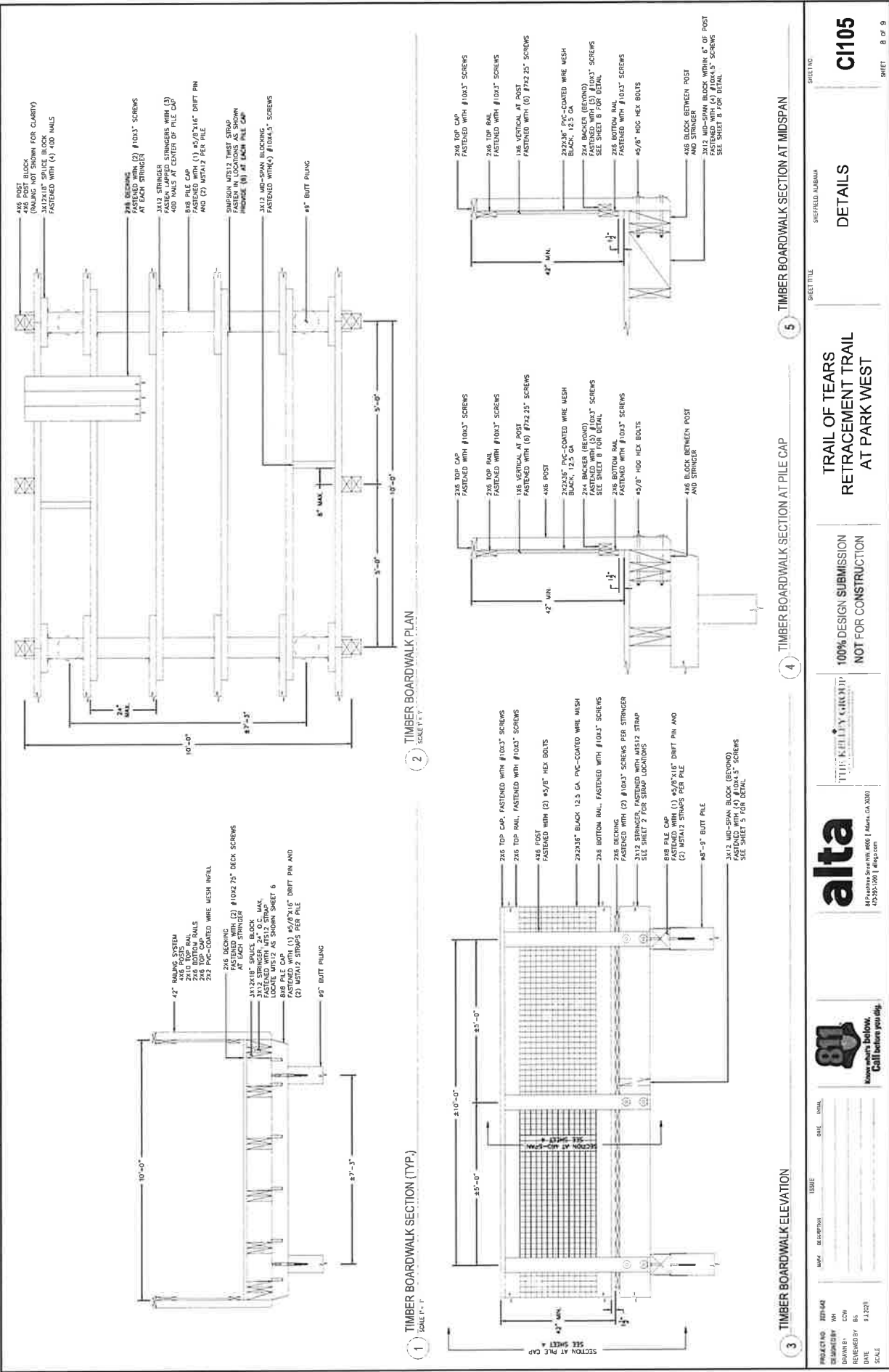
PLAN AND PROFILE

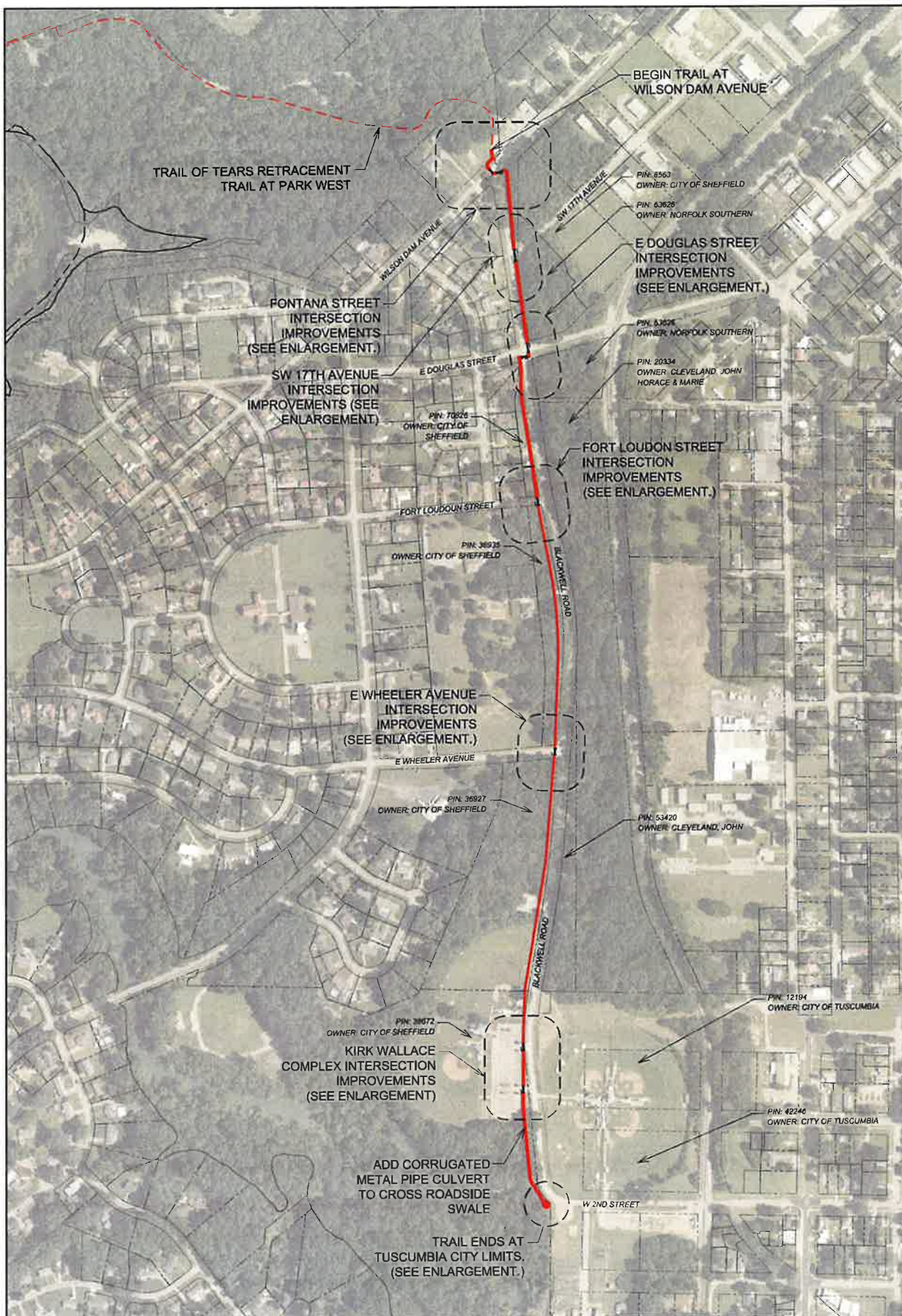
SHEET NO. C1101

SHEET 4 OF 8









CONTEXT MAP
SCALE: 1" = 200'

BLACKWELL ROAD
TRAIL OF TEARS
RETRACEMENT TRAIL

CONCEPTUAL ALIGNMENT
(NOT FOR CONSTRUCTION)

LEGEND

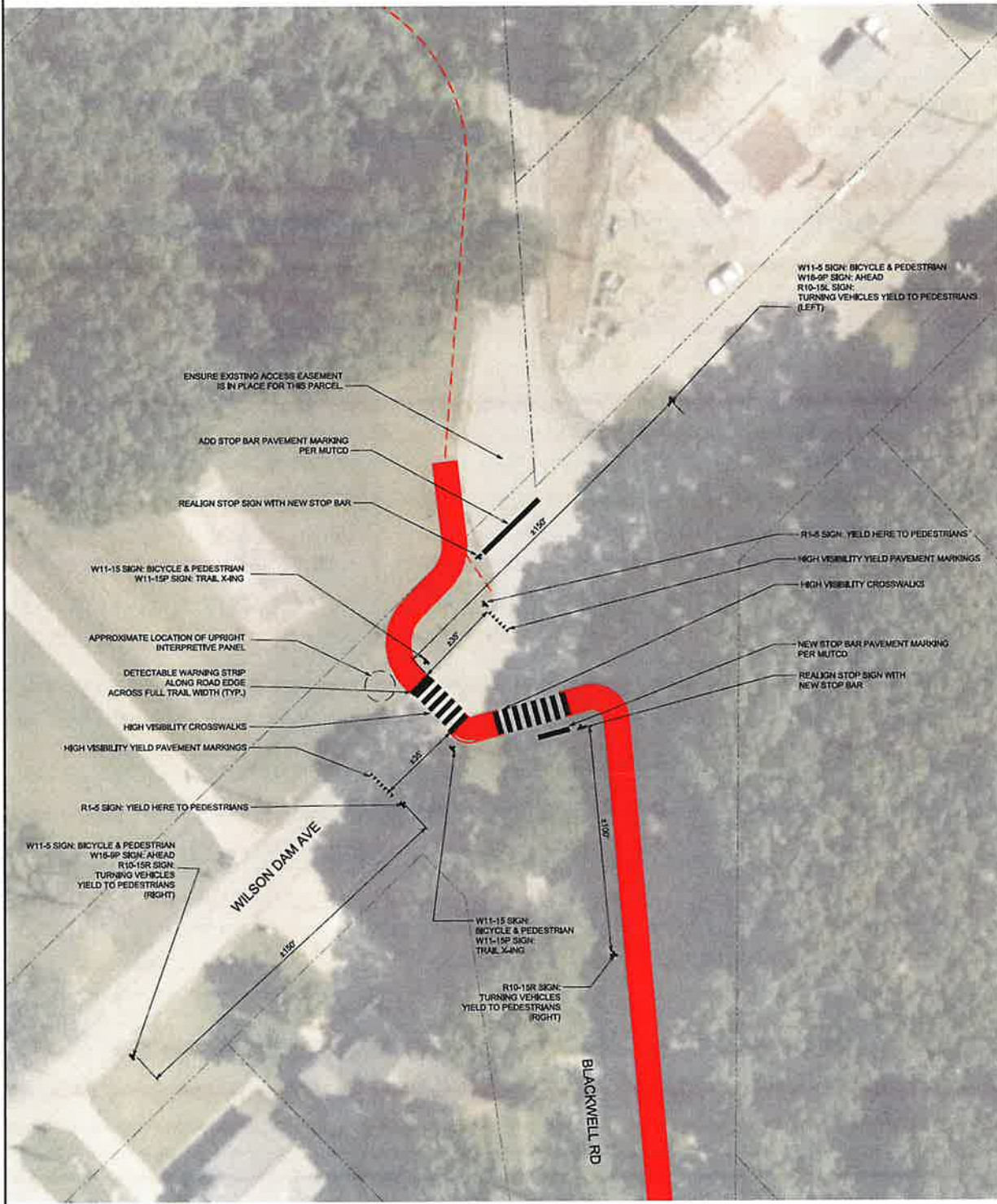
PARCEL LINE
TRAIL CENTERLINE

PARCEL DATA SOURCE:
COLDBERT COUNTY, AL (DATE: UNKNOWN)

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84 Peachtree Street NW, #200 | Atlanta, GA 30303
478-792-1240 | alta@alta.com

THE KELLEY GROUP



WILSON DAM AVE CONCEPTUAL ALIGNMENT

SCALE: 1" = 20'

**BLACKWELL ROAD
TRAIL OF TEARS
RETRACEMENT TRAIL**

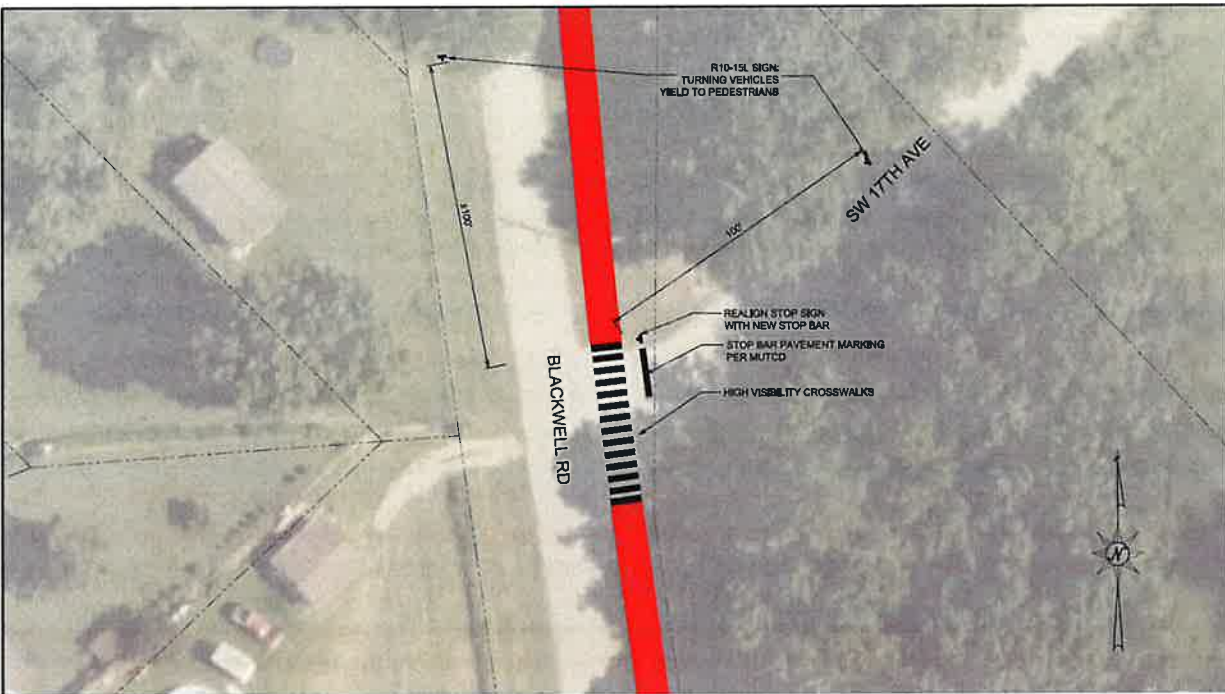
**WILSON DAM AVE ENLARGEMENT
(NOT FOR CONSTRUCTION)**

LEGEND

PARCEL LINE
TRAIL CENTERLINE
PARCEL DATA SOURCE:
COLBERT COUNTY, AL (DATE UNKNOWN)

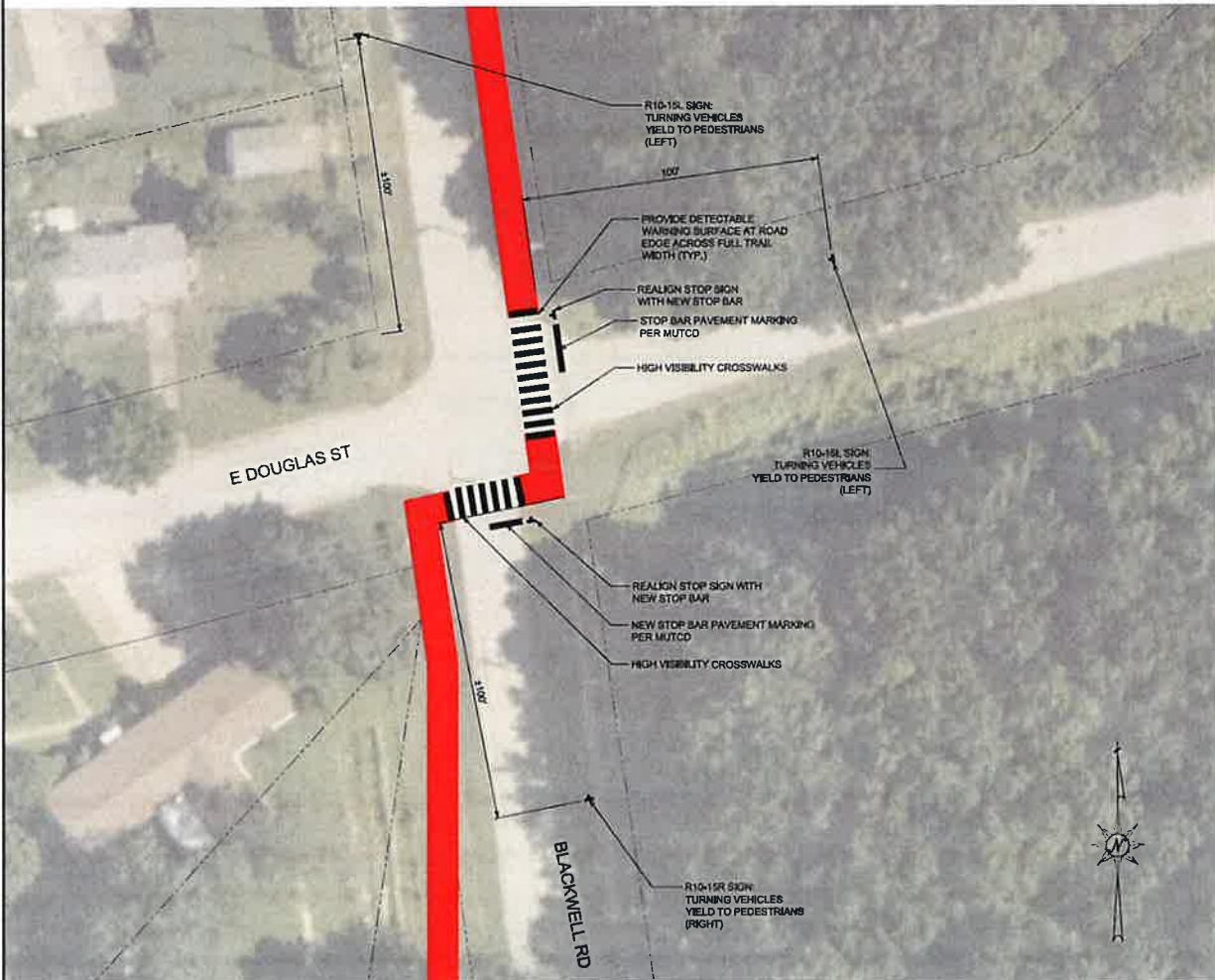
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THE KELLEY GROUP



SW 17TH AVENUE CONCEPTUAL ALIGNMENT

SCALE: 1" = 20'



E DOUGLAS ST CONCEPTUAL ALIGNMENT

SCALE: 1" = 20'

BLACKWELL ROAD
TRAIL OF TEARS
RETRACEMENT TRAIL

E DOUGLAS ST AND SW 17TH
AVE ENLARGEMENTS
(NOT FOR CONSTRUCTION)

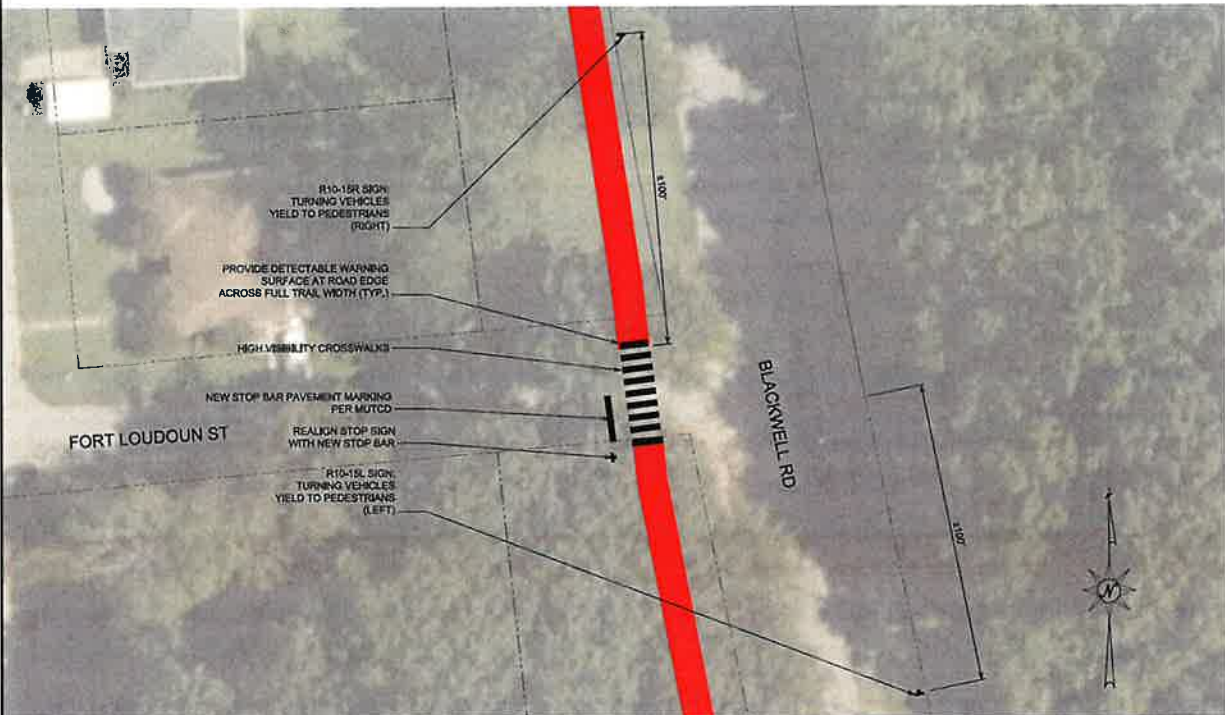
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PARCEL LINE
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PARCEL DATA SOURCE
COLBERT COUNTY, AL (DATE UNKNOWN)

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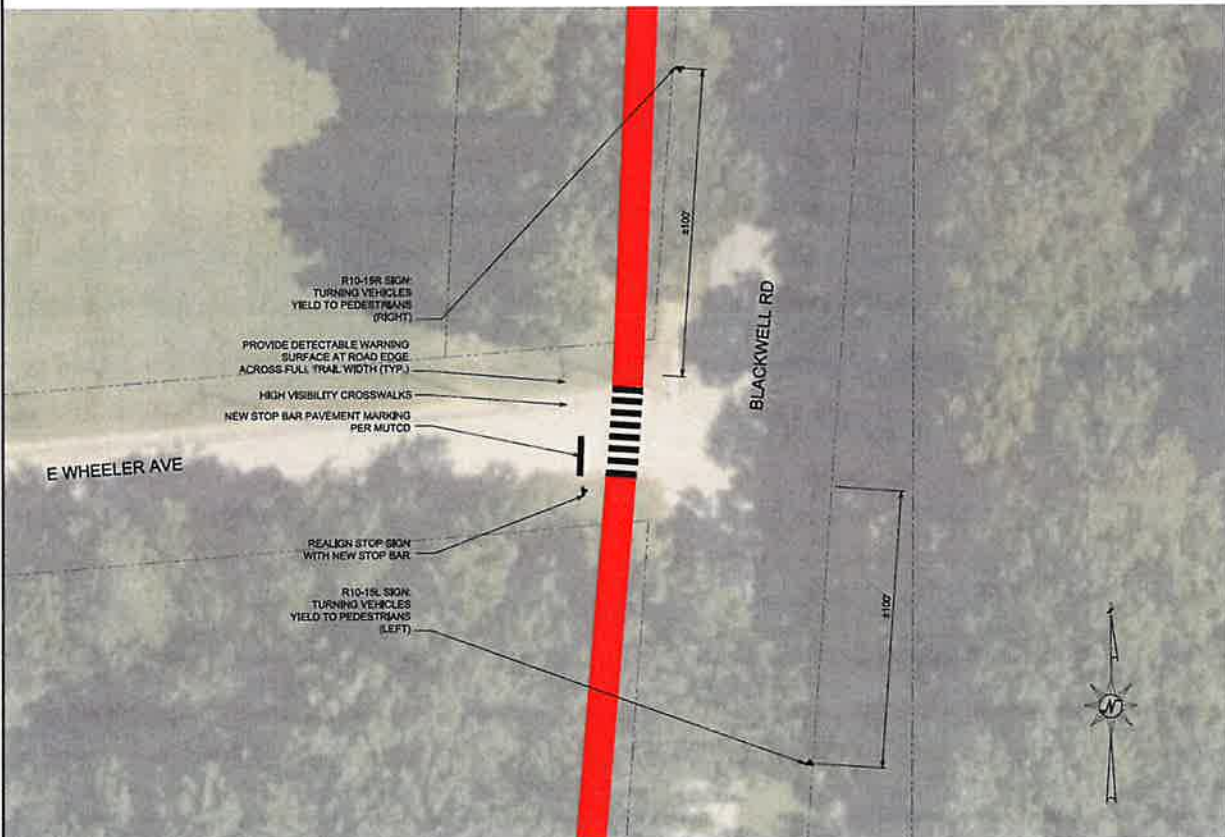
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478-260-1231 | alta.org

THE KELLY GROUP



FORT LOUDOUN ST CONCEPTUAL ALIGNMENT

SCALE: 1"=20'



E WHEELER AVE CONCEPTUAL ALIGNMENT

SCALE: 1"=20'

BLACKWELL ROAD
TRAIL OF TEARS
RETRACEMENT TRAIL

E WHEELER AVE AND FORT
LOUDOUN ST ENLARGEMENTS
(NOT FOR CONSTRUCTION)

LEGEND

PARCEL LINE
TRAIL CENTERLINE
PARCEL DATA SOURCE:
COLBERT COUNTY, AL (DATE UNKNOWN)

alta

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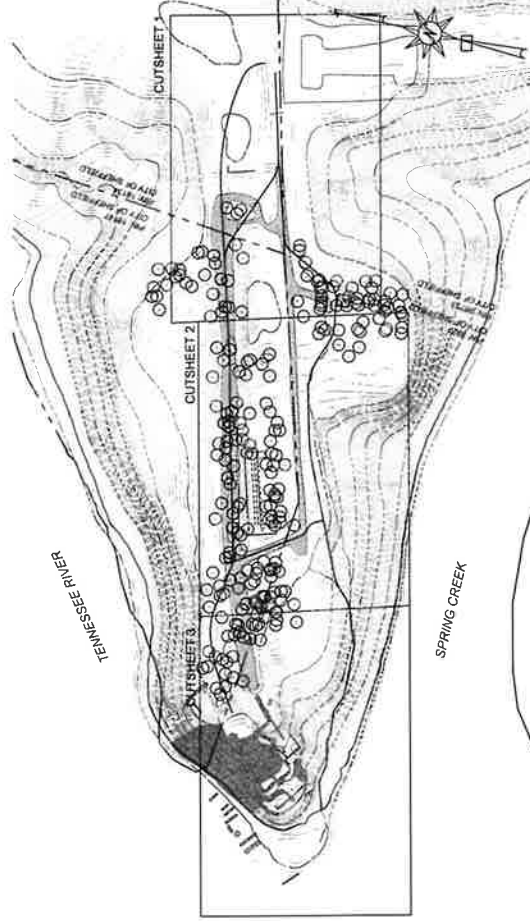
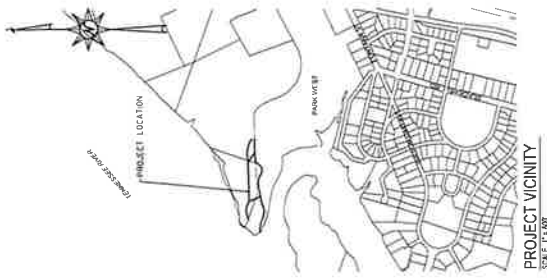
THE KELLY GROUP

SHEFFIELD, AL

TRAIL OF TEARS NATIONAL HISTORIC TRAIL AT TUSCUMBIA LANDING

100% DESIGN SUBMISSION

SEPT 2021



SITE LAYOUT
SCALE 1" = 100'

PROJECT OWNER
City of Sheffield, AL
Mayor Steve Stanley
600 N Montgomery Avenue
Sheffield, AL 35660
256.383.0250

PROJECT CONSULTANTS
Alta Planning + Design, Inc.
84 Peachtree St NW
Suite 600
Atlanta, GA 30303
470.290.1200

The Kelly Group
105 W 2nd St
Tuscomb, AL 35574
255.248.7030

GENERAL NOTES

1. A MINIMUM OF 24 HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF SHEFFIELD BUILDING DEPARTMENT AT (256) 386-5666.
2. ALL NEWLY CUT OR FILLED AREAS LACKING ADEQUATE VEGETATION SHALL BE MULCHED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
4. ALL FILL SOILS SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-898) WITHIN 3% OF OPTIMUM MOISTURE CONTENT IN LIFTS NOT TO EXCEED SIX (6) INCHES OF COMPACTED THICKNESS.
5. ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE STATE OF ALABAMA STANDARD CONSTRUCTION SPECIFICATIONS.
6. PROPERTY BOUNDARIES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION, GRADING, AND CLEARING, AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
7. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE CITY OF SHEFFIELD BUILDING DEPARTMENT OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
8. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
9. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SILTATION INTO SURROUNDING HYDROLOGIC FEATURES AND/OR ADJACENT PROPERTIES.
10. EXISTING SITE DATA INCLUDING BUT NOT LIMITED TO LOCATIONS OF EXISTING ROADWAY, CULTURAL SITES, AND TREES ARE BASED ON AERIAL PHOTOGRAPHY AND GIS DATA AND SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

DRAWING INDEX

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4 - 6	EXISTING CONDITIONS
7 - 9	DEMOLITION
10 - 12	LAYOUT PLANS
13 - 16	GRADING PLANS
17 - 19	PROFILES
20 - 25	DETAILS

PROJECT NO.	2021-242
DESIGNED BY	WM
DRAWN BY	CCW
REVIEWED BY	BS
DATE	12.20.20
SCALE	



100% DESIGN SUBMISSION

TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

COVER SHEET

CG001

SHEET NO.

SHEET TITLE

SHEFFIELD, ALABAMA

SHEET 1 OF 25

GENERAL NOTES

1. ALABAMA STATE DEPARTMENT OF TRANSPORTATION MATERIAL AND CONSTRUCTION SPECIFICATIONS SHALL BE IN EFFECT FOR THIS PROJECT.
2. CURRENT NATIONAL "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) SHALL BE IN EFFECT FOR THIS PROJECT.
3. ADDITIONAL NOTES MAY BE FOUND ON SUBSEQUENT DRAWINGS, SUCH NOTES, WHILE PERTAINING TO THE SPECIFIC DRAWING THEY ARE PLACED ON, ALSO SUPPLEMENT THE GENERAL NOTES LISTED HEREIN.
4. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTION, LIDAR DATA, AND AVAILABLE SURVEY INFORMATION ON FILE WITH THE CITY OF SHEFFIELD. A FIELD SURVEY WAS NOT RUN PRIOR TO THE DEVELOPMENT OF THESE PLANS. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH THE CONDITIONS AND A.O.B.E.
5. THE CONTRACTOR SHALL EXAMINE AND VERIFY IN THE FIELD ALL EXISTING CONDITIONS AND DIMENSIONS WITH THOSE SHOWN ON THE PLANS. THE CONTRACTOR SHALL USE THE FIELD CONDITIONS AND DIMENSIONS, AND NOTE ANY CHANGES TO THOSE SHOWN ON THE PLANS A.O.B.E. THE RESULTS OF THIS CHECK OF CONDITIONS AND DIMENSIONS SHALL BE SO NOTED ON THE DRAWINGS SUBMITTED FOR APPROVAL.
6. THERE SHALL BE NO CLAIM AGAINST THE CITY OF SHEFFIELD OR THE DESIGN CONSULTANT BY THE CONTRACTOR FOR WORK PERTAINING TO MODIFICATIONS AS MAY BE REQUIRED DUE TO ANY DIFFERENCE BETWEEN ACTUAL FIELD CONDITIONS AND THOSE SHOWN BY THE DETAILS AND DIMENSIONS ON THE CONTRACT PLANS. THE CONTRACTOR WILL BE PAID AT THE UNIT BID PRICE FOR THE ACTUAL QUANTITIES OF MATERIALS USED OR FOR THE WORK PERFORMED, AS INDICATED BY THE VARIOUS ITEMS IN THE CONTRACT.
7. AT ALL TIMES, THE CONTRACTOR SHALL TAKE MEASURES TO PROVIDE POSITIVE DRAINAGE OF SURFACE RUNOFF FROM THE WORK SITE AND CONTROL OF THE RUNOFF TO PREVENT EROSION, POLLUTION, SEDIMENTATION OR OTHER DISCHARGES WHICH WOULD AFFECT PROPERTIES ADJACENT TO THE WORK SITE. ALL MEASURES TAKEN TO PROVIDE POSITIVE DRAINAGE SHALL BE APPROVED BY THE CITY OF SHEFFIELD PRIOR TO CONSTRUCTION. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.
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9. THE CLEANING AND GRUBBING ITEM SHALL CONSIST OF THE REMOVAL OF THE BRUSH AND TREE STUMPS WITHIN THE PROJECT LIMITS WHERE INDICATED ON THE PLANS AND A.O.B.E. IN ADDITION, TREE BRANCHES OVERHANGING THE EDGE OF THE PROPOSED TRAIL LIMITS SHALL BE TRIMMED BACK TO PROVIDE A 12.0 FOOT VERTICAL CLEARANCE. CONTRACTOR MAY NOT BURY STUMPS. NO SEPARATE PAYMENT SHALL BE MADE FOR WORK CALLED FOR BY NOTES ON THE PLANS, IN THE SPECIFICATIONS, OR UNDER THE HEADING GENERAL NOTES UNLESS PAYMENT IS SPECIFICALLY INDICATED BY ITEM NUMBER. THE COST OF WORK FOR WHICH NO SEPARATE PAYMENT IS INDICATED SHALL BE INCLUDED IN THE

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12. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORTS, BRACING OR OTHER DEVICES THAT MAY BE REQUIRED OR THAT MAY BE DIRECTED BY THE ENGINEER TO PROTECT THE SAFETY OF ADJACENT STRUCTURES, ROADWAYS OR THE VARIOUS ITEMS IN THE CONTRACT. NO SEPARATE PAYMENT SHALL BE MADE.
13. PAVED AREAS DISTURBED BY THE CONTRACTOR WHICH ARE NOT PART OF THE WORK TO BE PERFORMED UNDER THIS CONTRACT, SHALL BE RESTORED TO AN ACCEPTABLE CONDITION AS SPECIFIED BY AND SATISFACTORY TO THE CITY OF SHEFFIELD ENGINEER.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS.
15. PROVISIONS TO DE-WATER EXCAVATIONS, DUE TO CONSTRUCTION OPERATIONS ALONG THE PROJECT MAY BE REQUIRED. THERE SHALL BE NO SEPARATE PAYMENT FOR ANY DE-WATERING SYSTEMS. COST SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.
16. THE CONTRACTOR SHALL KEEP ALL DRAINAGE FACILITIES, WITHIN THE CONTRACT LIMITS, CLEAN AND FULLY OPERATIONAL AT ALL TIMES (A.O.B.E.). THIS WORK SHALL BE INCLUDED UNDER VARIOUS ITEMS IN THE CONTRACT.
17. THE CONTRACTOR SHALL PROVIDE SURVEY AND STAKEOUT.
18. THE CONTRACTOR SHALL BE REQUIRED TO PROTECT THEIR WORKERS AT ALL TIMES IN CONFORMANCE WITH APPLICABLE OSHA REGULATIONS.
19. WATERING NEEDED FOR VEGETATION AND OTHER LANDSCAPING ITEMS SHALL BE INCLUDED UNDER EACH RESPECTIVE ITEM IN THE CONTRACT.
20. DETAILS ON THE DRAWINGS LABELED AS NOT TO SCALE ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY.
21. LOCATION OF UTILITIES, PUBLIC AND/OR PRIVATE, INDICATED ON THE PLANS AS EXISTING AND/OR TO BE CONSTRUCTED ARE APPROXIMATE ONLY. THEIR EXACT LOCATIONS SHALL BE VERIFIED BY A CO-LOCATE SERVICE PRIOR TO CONSTRUCTION COMMENCEMENT. ADDITIONAL UTILITY LINES, WHETHER ABANDONED OR IN SERVICE, MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT OPERATIONS AND TAKE NECESSARY PRECAUTIONS SUCH THAT INTERFERENCE WITH OR DAMAGE TO THESE OR OTHER FACILITIES DURING THE COURSE OF CONSTRUCTION IS PREVENTED. PRIOR TO ANY EXCAVATION, THE CONTRACTOR IS TO CALL ALABAMA 811 TO HAVE UNDERGROUND UTILITIES LOCATED.
23. IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY SERVICE, CAUSING THE INTERRUPTION IN SAID SERVICE, THE CONTRACTOR SHALL IMMEDIATELY COMMENCE WORK TO RESTORE SERVICE AND MAY NOT CEASE WORK UNTIL SERVICE IS RESTORED. ALL COSTS TO REPAIR OR REPLACE DAMAGE UTILITIES SHALL BE AT THE EXPENSE OF THE CONTRACTOR. IF THE CONTRACTOR DOES NOT MAKE IMMEDIATE NECESSARY REPAIRS, THE RESPECTIVE OWNING COMPANIES OR MUNICIPAL FORCES MAY

24. DO THE WORK, AND THE COST THEREOF CHARGED AGAINST THE CONTRACTOR.
25. THE CONTRACTOR SHALL MAKE EXPLORATIONS IF NECESSARY A.O.B.E. TO DETERMINE THE DIMENSIONS AND LOCATIONS OF LINES THAT MAY BE SUBJECT TO DAMAGE.
26. THE CONTRACTOR SHALL PROTECT ALL UNDERGROUND UTILITIES TO REMAIN IN PLACE FROM DAMAGE DURING THE CONSTRUCTION. METHODS OF PROTECTION MAY INCLUDE STEEL PLATES OVER THE UTILITY SO THAT WHEEL LOADINGS FROM CONSTRUCTION VEHICLES DO NOT DAMAGE THE UTILITY.

DAMAGE TO EXISTING STRUCTURES; VEGETATION/SHRUBS; OR OTHER AMENITIES

26. NUMEROUS STRUCTURES AND VEGETATION/SHRUBS ARE PRESENT WITHIN THE WORK LIMITS AND ARE TO REMAIN UNDISTURBED. THE CONTRACTOR SHALL TAKE EXTRA PRECAUTIONS TO PROTECT THESE ITEMS. ALL DAMAGE TO THE EXISTING STRUCTURES OR MATERIALS WHICH ARE NOT PART OF THE INTENDED WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR WITHOUT COST TO THE OWNER AND TO THE SATISFACTION OF THE CITY OF SHEFFIELD ENGINEER.

MAINTENANCE JURISDICTION

27. UPON COMPLETION OF THE PROJECT, THE TRAIL, INCLUDING BRIDGES AND DRAINAGE, WILL BE MAINTAINED BY CITY OF SHEFFIELD.

RIGHT-OF-WAY NOTES

28. THE CONTRACTOR IS TO CONFINE ALL WORK BEING PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY (ROW) OR ON CITY-OWNED PROPERTY, INCLUDING BUT NOT LIMITED TO VEHICLE ACCESS, STORAGE OF EQUIPMENT, MATERIALS, DEBRIS AND WASTE; LANDSCAPING, VEGETATION REMOVAL AND MANAGEMENT; GRADING, SEEDING AND THE INSTALLATION OF TURF, AND THE INSTALLATION OF ANY FENCES OR PROTECTIVE BARRIER UNLESS SPECIFIC AGREEMENTS ARE MADE BETWEEN THE CONTRACTOR AND LANDOWNER PERMITTING SUCH ACTIVITIES.
30. IF THE CONTRACTOR IS UNABLE TO IDENTIFY THE LIMITS OF THE RIGHTS-OF-WAY WHEN THE CONTRACT CALLS FOR WORK IN THOSE VICINITIES, THE CONTRACTOR MUST CONTACT THE PROJECT ENGINEER FOR DEFINITIVE BOUNDARY DETERMINATIONS BEFORE ANY WORK MAY BE INITIATED AT THOSE LOCATIONS.
31. RELEASES FOR ANY NON-ESSENTIAL CONTRACT WORK OUTSIDE OF THE EXISTING RIGHTS-OF-WAY, INCLUDING PLANTINGS, LANDSCAPING OR DRIVEWAY ENHANCEMENT, ARE PROVIDED BY THE CITY OF SHEFFIELD AND IN NO INSTANCE ARE TO BE SECURED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT INVADE UPON PRIVATE PROPERTIES, LANDS OR BUILDINGS OUTSIDE OF THE RIGHTS-OF-WAY FOR ANY REASON WITHOUT FIRST SECURING WRITTEN PERMISSION FROM THE PROPERTY OWNER.
32. THE CONTRACTOR WILL BE HELD LIABLE FOR ANY DAMAGES DONE TO PRIVATE PROPERTY, ANY SUCH INJURIES OR DAMAGES SHALL

- BE SATISFACTORILY REPAIRED OR ITEMS REPLACED AT THE CONTRACTOR'S EXPENSE.

EXCAVATION NOTES

33. ASSUME ALL EXCAVATED MATERIAL IS NOT SUITABLE FOR EMBANKMENT CONSTRUCTION.
34. SUBGRADE IMPROVEMENTS ARE ANTICIPATED TO BE REQUIRED AS NOTED IN THE PLANS. ADDITIONAL AREAS MAY BE REQUIRED, A.O.B.E. AND PAID FOR UNDER RESPECTIVE ITEMS.

ENVIRONMENTAL PERMITS

1. A CONSTRUCTION BEST MANAGEMENT PRACTICES PLAN (CBMP) AND ASSOCIATED EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLANS WERE NOT DEVELOPED AS A PART OF THIS CONTRACT AND SHOULD BE DEVELOPED BY A QUALIFIED DESIGN PROFESSIONAL PRIOR TO ANY LAND DISTURBANCE ASSOCIATED WITH THIS PROJECT.
2. THE CONTRACTOR SHALL COMPLY WITH ALL ENVIRONMENTAL REQUIREMENTS AND SPECIAL CONDITIONS CONTAINED IN THE PERMITS ISSUED FOR THE PROJECT AND PROVIDED IN THE CONSTRUCTION DOCUMENTS.

TREATED TIMBER AND LUMBER

- DUE TO HEALTH CONCERNS ON THE USE OF CHROMATED COPPER ARSENATE (CCA) AS A WOOD PRESERVATIVE, LUMBER TREATED WITH CCA CANNOT BE USED ON THIS PROJECT.

CLEARING NOTES

4. CONTRACTOR SHALL ABIDE BY ALL CUTTING RESTRICTIONS AS CONTAINED IN THE PLANS AND A.O.B.E.
5. THE PLANS SHOW THE DESIRED LOCATION OF THE PROPOSED TRAIL TO BE CONSTRUCTED. THE CONTRACTOR SHALL LAYOUT THE PROPOSED ALIGNMENT AS SHOWN IN THE CONTRACT PLANS. THE CLEARING LIMITS HAVE BEEN DEFINED IN RELATION TO THE PROPOSED ALIGNMENT AND SHALL BE VERIFIED BY THE CITY OF SHEFFIELD ENGINEER PRIOR TO COMMENCEMENT OF ANY CLEARING.
6. THIS CONTRACT INCLUDES TREE AND BRUSH CUTTING WITHIN THE LIMITS SHOWN ON THE PLANS. THE TREES AND BRUSH SHALL BE CUT APPROXIMATELY 6" TO 12" ABOVE GRADE IN ACCORDANCE WITH THE FOLLOWING
- EMBAKMENT = REMOVE STUMPS
- SHOULDER = GROUND OR REMOVE
- OUTSIDE SHOULDER = MAY BE REMOVED, GROUND, OR CUT FLUSH
- ANY DEAD, DYING OR DISEASED TREES, WITHIN THE PROJECT LIMITS, REGARDLESS OF SIZE OR TYPE, SHALL BE REMOVED TO A MANNER AS DIRECTED BY THE CITY OF SHEFFIELD ENGINEER.
- ALL STUMPS WITHIN THE PROPOSED EDGE OF TRAILBED SHALL BE REMOVED. STUMPS LOCATED BETWEEN THE EDGE OF THE TRAILBED AND THE EDGE OF THE AREA TO BE CLEARED AND GRUBBED THAT CANNOT BE CUT FLUSH WITHIN THE FINISHED SLOPE, OR ARE NOT TIGHTLY ROOTED, SHALL BE REMOVED.
- THIS CONTRACT SHALL INCLUDE CLEARING AND REMOVAL OF ANY REMAINING BRUSH AND TREES NECESSARY TO CONSTRUCT THE TRAIL AND CLEAR THE CORRIDOR AS DEFINED IN THE DRAWINGS.

PROJECT NO.	2021-042
DESIGNED BY	WH
DRAWN BY	CSW
REVIEWED BY	BS
DATE	10.20.2021
SCALE	



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TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

GENERAL NOTES

CG002

SHEET TITLE SHEET NO.

SHEFFIELD, ALABAMA

PROJECT PERMITS

1.

FINAL PROJECT PERMITTING AND SEQUENCING COORDINATION

SITE PERMITS/ENVIRONMENTAL PERMITS.

GENERAL CONTRACTOR TO PROVIDE ENGINEER WITH ALL CONTRACTOR AND SUBCONTRACTOR CONTACT, LICENSE, AND OTHER INFORMATION THAT IS REQUIRED TO BE SUBMITTED TO CITY OF SHEFFIELD IN ORDER TO OBTAIN THE PROJECT'S SITE PERMITS. CONTRACTOR TO FILL OUT THE SITE PERMIT APPLICATION WITH CONTRACTOR, SUBCONTRACTOR AND OTHER INFORMATION AS REQUIRED. SIGN THE PERMIT APPLICATION, AND HAVE SITE SUBCONTRACTOR SIGN THE APPLICATION.

CONTRACTOR SHALL PROVIDE THE COMPLETED PERMIT APPLICATION TO THE ENGINEER AS WELL AS ANY OTHER INFORMATION NECESSARY FOR OBTAINING THE PERMIT, INCLUDING BUT NOT LIMITED TO CERTIFICATE OF INSURANCE IN THE AMOUNT OF THE CONTRACT LIMITS.

TREE PROTECTION AND REMOVAL:

EXISTING TREES 3 INCH DBH OR LARGER ARE TO BE PRESERVED OR REMOVED AS REQUIRED BY CITY OF SHEFFIELD AUTHORITY. ALL EXISTING TREES LESS THAN 3 INCH DBH WITHIN THE PLAN LIMIT OF DISTURBANCE MAY BE REMOVED. FOLLOWING THE NOTICE TO PROCEED, GENERAL CONTRACTOR TO INSTALL ANY REQUIRED TREE PROTECTION FENCING AND COORDINATE INSPECTION AND APPROVAL WITH THE CITY OF SHEFFIELD AND OTHER AUTHORITIES.
2.

BUILDING PERMITS.

GENERAL CONTRACTOR TO PROVIDE ENGINEER WITH ALL CONTRACTOR AND SUBCONTRACTOR CONTACT, LICENSE, AND OTHER INFORMATION THAT IS REQUIRED TO BE SUBMITTED TO CITY OF SHEFFIELD IN ORDER TO OBTAIN THE PROJECT'S BUILDING PERMITS. CONTRACTOR TO FILL OUT THE BUILDING PERMIT APPLICATION WITH CONTRACTOR, SUBCONTRACTOR, AND OTHER INFORMATION AS REQUIRED. SIGN THE PERMIT APPLICATION, AND HAVE ALL TRADE SUBCONTRACTORS SIGN THE APPLICATION.

CONTRACTOR SHALL PROVIDE THE COMPLETED PERMIT APPLICATION TO THE ENGINEER AND ANY OTHER INFORMATION NECESSARY FOR OBTAINING THE PERMIT, INCLUDING BUT NOT LIMITED TO A CERTIFICATE OF INSURANCE IN THE AMOUNT OF THE CONTRACT LIMITS.
3.

GENERAL CONTRACTOR TO PICK UP AND PAY FOR BUILDING PERMITS FOLLOWING NOTICE FROM ENGINEER.

GENERAL CONTRACTOR CAN BE REIMBURSED FOR THE COST OF SITE AND BUILDING PERMITS AT COST, BASED ON RECEIPTS PROVIDED, FROM THE PERMITTING ALLOWANCE.
4.

ADDITIONAL PERMITTING.

GENERAL CONTRACTOR TO COORDINATE DIRECTLY WITH CITY OF SHEFFIELD TO APPLY FOR, SCHEDULE, PAY FOR, AND PICK UP ALL OTHER REQUIRED PROJECT PERMITS, INCLUDING, BUT NOT LIMITED TO: TEMPORARY TRAILER PERMIT, FIRE HYDRANT CONSTRUCTION PERMIT, SIGN PERMITS, AND OTHER SUPPLEMENTAL PERMITS.

PROJECT NO 2024-42
DESIGNED BY WH
DRAWN BY CCW
REVIEWED BY BS
DATE 10/26/2023
SCALE

NAME	DESCRIPTION	DATE	INITIAL



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TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

GENERAL NOTES

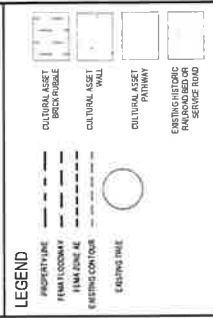
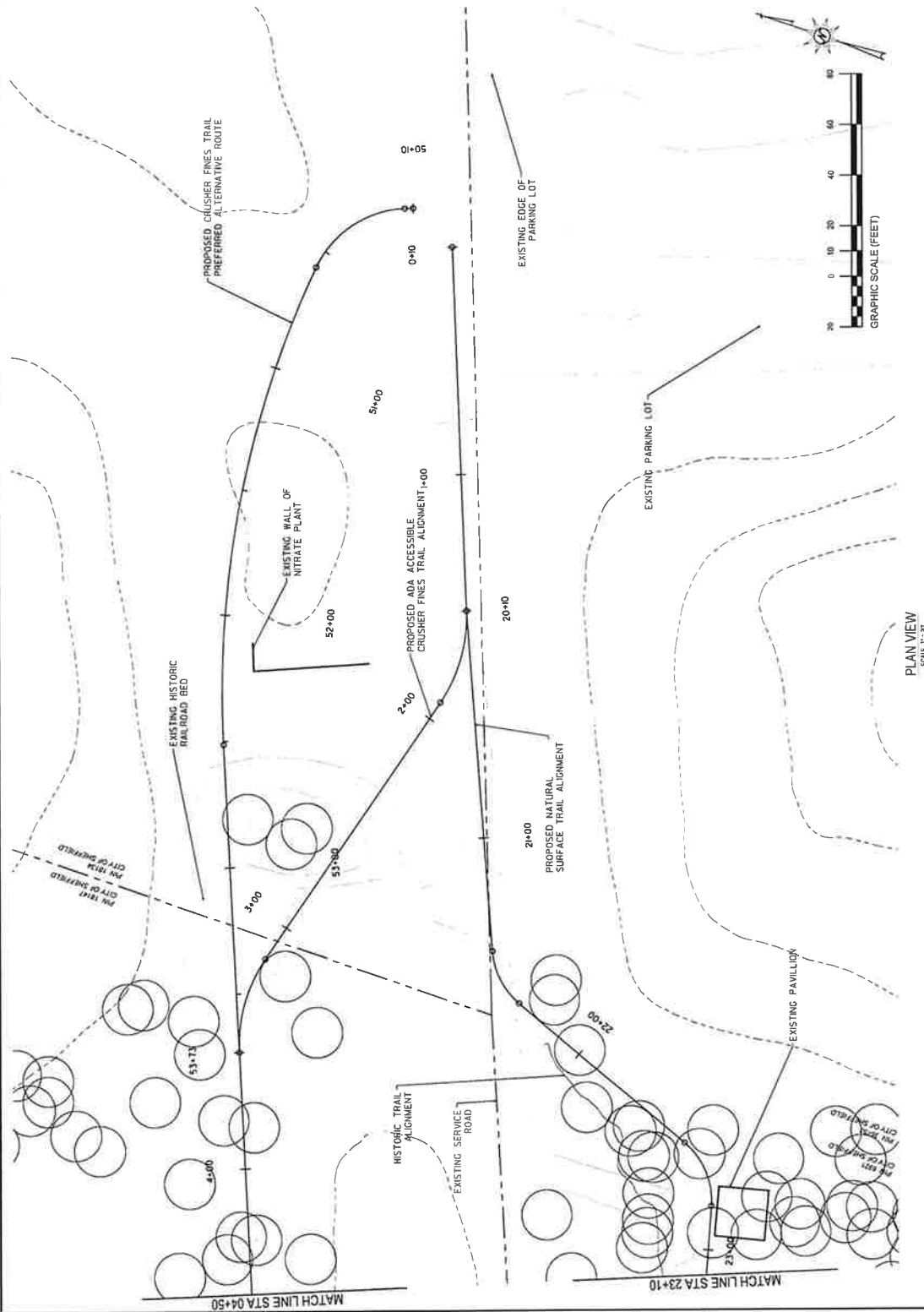
CG003

SHEETING

SHEET TITLE SHEFFIELD, ALABAMA

SHEET 3 OF 25

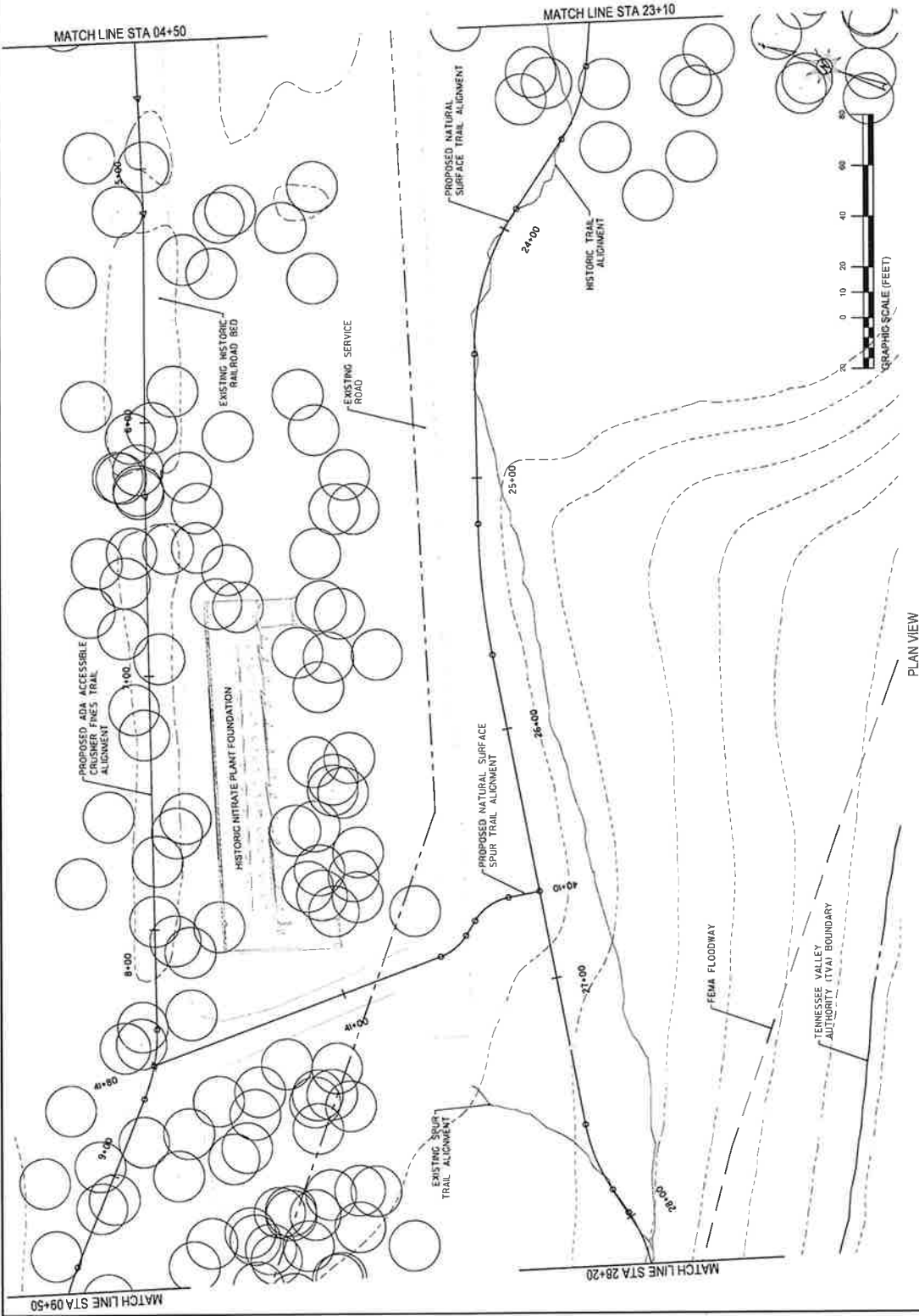
EXISTING CONDITIONS NOTES



PLAN VIEW
SCALE: 1" = 20'

PROJECT NO: 2021-001	DATE: 11/11/21	SCALE: 1" = 20'
DESIGNED BY: CHANBY	COR: 11/11/21	SCALE: 1" = 20'
PERMITTED BY: 11/11/21	DATE: 11/11/21	SCALE: 1" = 20'
80		
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TRAIL OF TEARS NATIONAL HISTORIC TRAIL AT TUSCUMBIA LANDING		
EXISTING CONDITIONS		
SHEET TITLE		
SHEET NO: 4 OF 25		
CS101		

EXISTING CONDITIONS NOTES



LEGEND

PROPERTY LINE	CULTURAL ASSET
FEMA FLOODWAY	BRICK FOUNDATION
EXISTING CONCRETE	CULTURAL ASSET WALL
EXISTING TREE	CULTURAL ASSET PATHWAY
	EXISTING HISTORIC RAILROAD BED OR SERVICE ROAD

PROJECT NO. 2023-040	DESIGNED BY	CON	DATE	3/1/2021	SCALE	1" = 20'
DRAWN BY						
REVIEWED BY						
DATE						
SCALE						

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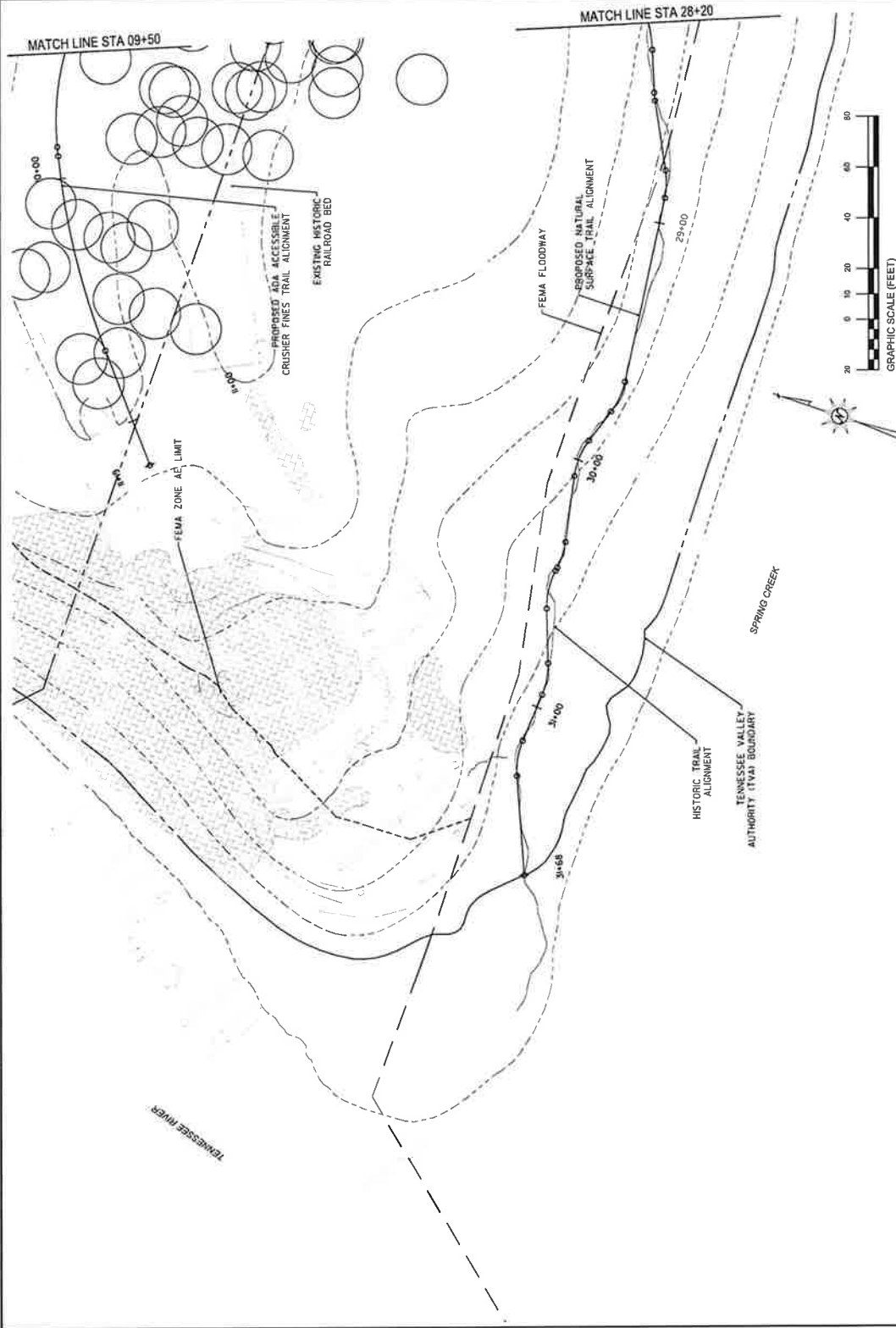
TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

EXISTING CONDITIONS

CS102

SHEET 5 OF 25

EXISTING CONDITIONS NOTES



PLAN VIEW
SCALE 1" = 20'

[illegible]

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TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

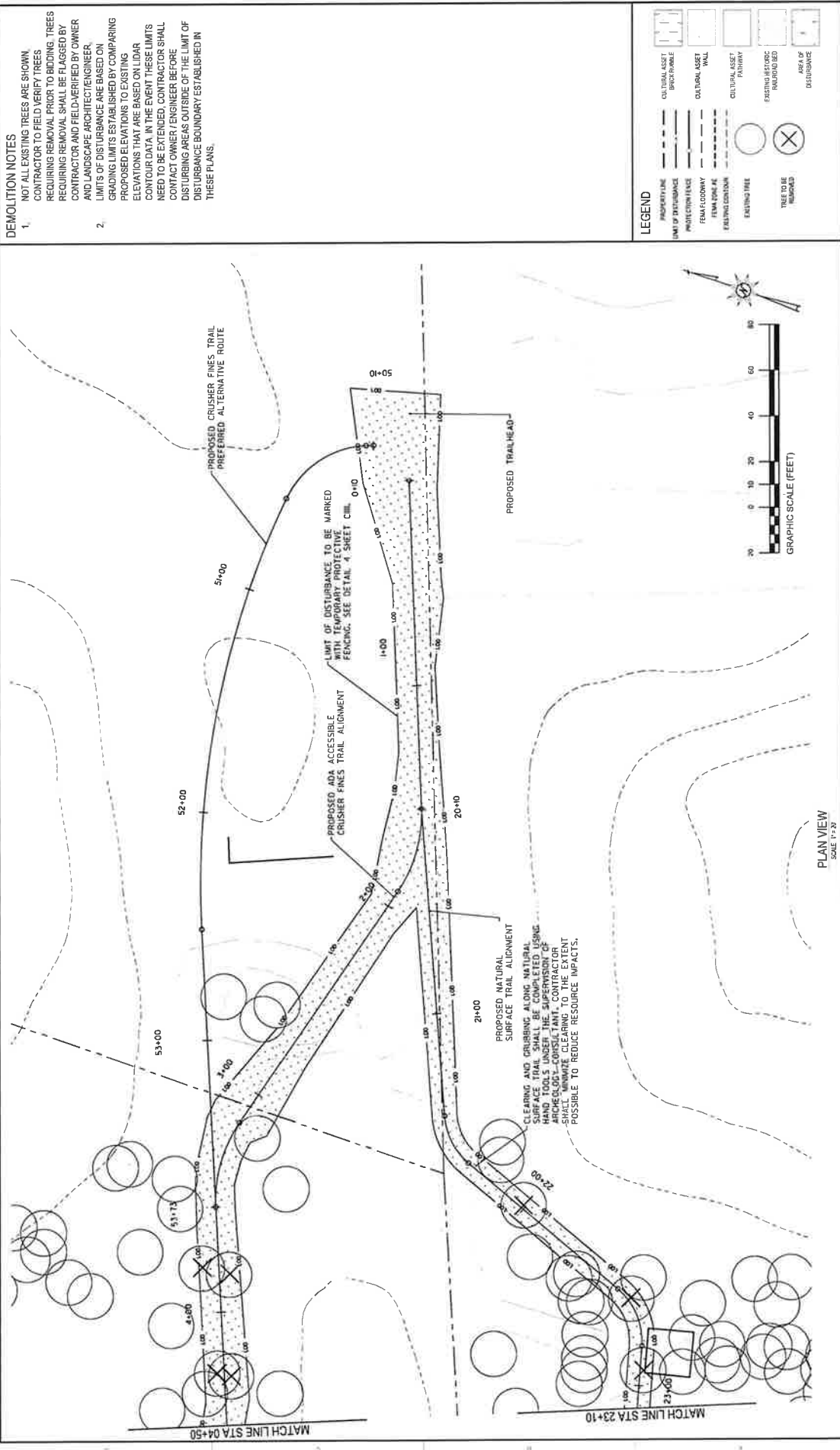
EXISTING CONDITIONS

CS103

SHEET 6 of 25

LEGEND

-



DEMOLITION NOTES

1. NOT ALL EXISTING TREES ARE SHOWN. CONTRACTOR TO FIELD VERIFY TREES REQUIRING REMOVAL PRIOR TO BIDDING. TREES REQUIRING REMOVAL SHALL BE FLAGGED BY CONTRACTOR AND FIELD VERIFIED BY OWNER AND LANDSCAPE ARCHITECT/ENGINEER. LIMITS OF DISTURBANCE ARE BASED ON GRADING LIMITS ESTABLISHED BY COMPARING PROPOSED ELEVATIONS TO EXISTING ELEVATIONS THAT ARE BASED ON LIDAR CONTOUR DATA. IN THE EVENT THESE LIMITS NEED TO BE EXTENDED, CONTRACTOR SHALL CONTACT OWNER/ENGINEER BEFORE DISTURBING AREAS OUTSIDE OF THE LIMIT OF DISTURBANCE BOUNDARY ESTABLISHED IN THESE PLANS.
- 2.

LEGEND

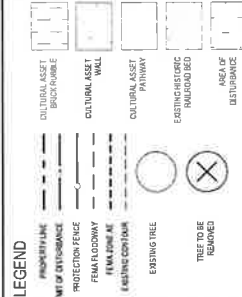
	PROPERTY LINE		CULTURAL ASSET
	LIMIT OF DISTURBANCE		STRUCTURABLE
	PROTECTIVE FENCE		CULTURAL ASSET
	TEMPORARY FENCE		WALL
	TEMPORARY FENCE		CULTURAL ASSET
	TEMPORARY FENCE		PATHWAY
	TEMPORARY FENCE		EXISTING HISTORIC
	TEMPORARY FENCE		RAILROAD BED
	TEMPORARY FENCE		AREA OF
	TEMPORARY FENCE		DISTURBANCE

PROJECT NO. 2024-02	DATE 11/11/24	ISSUE 1	SHEET NO. CD101
DESIGNED BY WH	DATE 11/11/24	100% DESIGN SUBMISSION	DEMOLITION
DRAWN BY CCM	DATE 11/11/24	TRAIL OF TEARS NATIONAL HISTORIC TRAIL AT TUSCUMBIA LANDING	
REVIEWED BY BS	DATE 11/11/24		
SCALE 1" = 20'	DATE 11/11/24		

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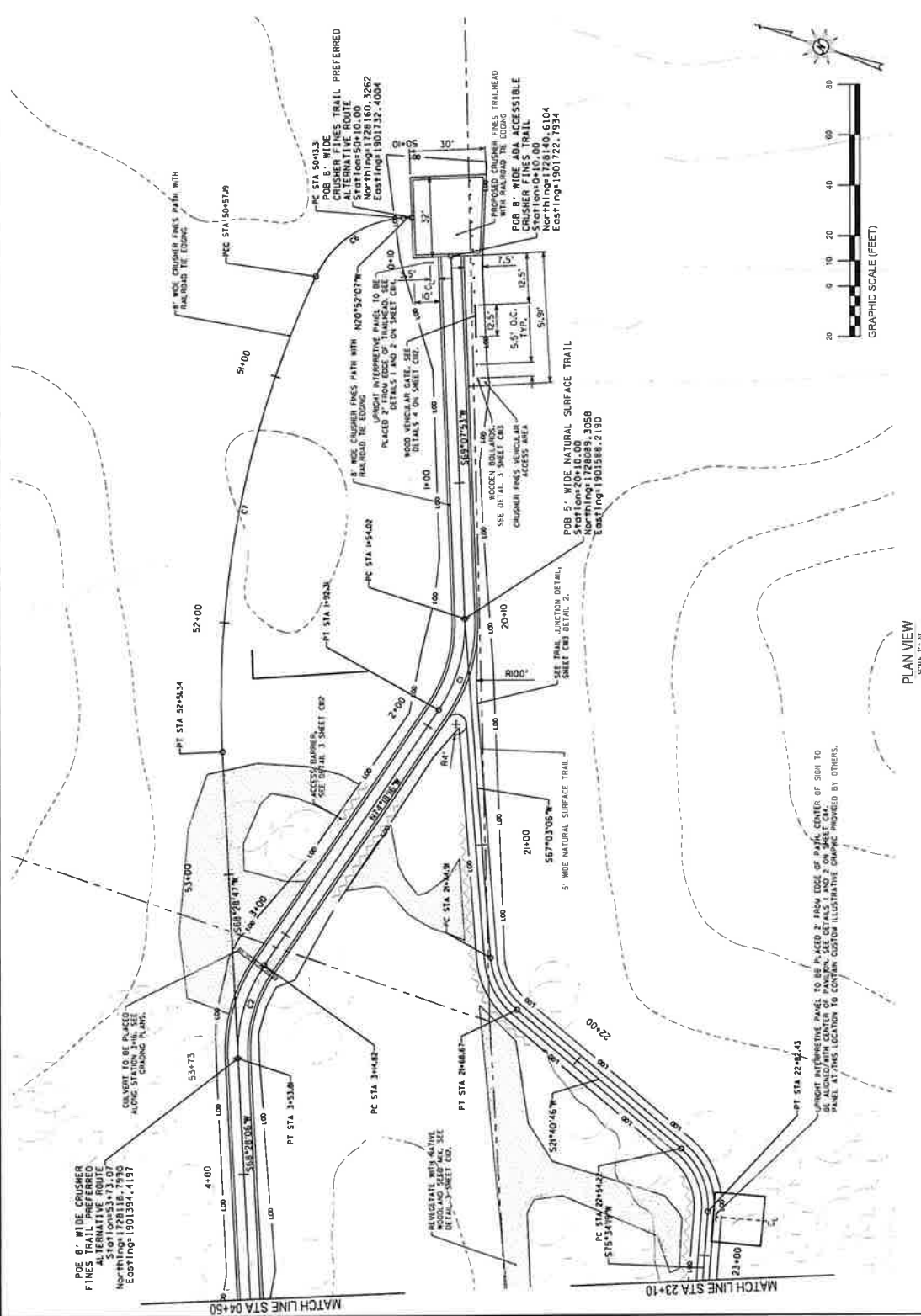
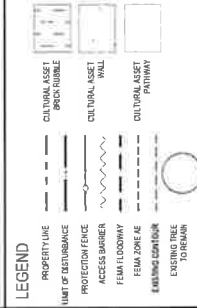
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1. NOT ALL EXISTING TREES ARE SHOWN. CONTRACTOR TO FIELD VERIFY TREES REQUIRING REMOVAL PRIOR TO BIDDING. TREES REMOVAL SHALL BE FLAGGED BY OWNER CONTRACTOR AND FIELD-VERIFIED BY OWNER, AND LANDSCAPE ARCHITECT/ENGINEER.
2. LIMITS OF DISTURBANCE ARE BASED ON GRADING LIMITS ESTABLISHED BY COMPARING PROPOSED ELEVATIONS TO EXISTING ELEVATIONS THAT ARE BASED ON LIDAR CONTOUR DATA. IN THE EVENT THESE LIMITS NEED TO BE EXTENDED, CONTRACTOR SHALL CONTACT OWNER / ENGINEER BEFORE DISTURBING AREAS OUTSIDE OF THE LIMIT OF DISTURBANCE BOUNDARY ESTABLISHED IN THESE PLANS.



PROJECT NO. 2221-642		DATE: INITIAL	
DESIGNED BY: WH	DRAWN BY: CCW	DATE: 5.3.2021	SCALE: 1" = 20'
REVIEWED BY: BS	DATE: 5.3.2021	 <p>Know what's below. Call before you dig.</p>	
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<p>TRAIL OF TEARS NATIONAL HISTORIC TRAIL AT TUSCUMBIA LANDING</p>		<p>DEMOLITION</p>	
SHEET TITLE: SHELFIELD ALABAMA		SHEET NO: CD102	

- LAYOUT NOTES**
1. ALL TRAIL ALIGNMENTS TO BE FLAGGED IN FIELD PRIOR TO CONSTRUCTION FOR REVIEW AND APPROVAL BY OWNER'S REPRESENTATIVE.
 2. ARCHAEOLOGY CONSULTANT TO BE PRESENT DURING BOARDWALK FOOTER EXCAVATION AND ANY CLEARING OR GRADING OF THE HISTORIC TRAIL TO ENSURE EXISTING RESOURCES ARE PRESERVED.
 3. INSTALLATION OF INTERPRETIVE PANELS ALONG THE 8' WIDE CRUSHER FINES PATH TO MEET ADA STANDARDS.



PLAN VIEW
SCALE 1" = 20'

UPRIGHT INTERPRETIVE PANELS TO BE PLACED 2' FROM EDGE OF PATH CENTER OF SIGN TO INTERPRETIVE PANELS. INTERPRETIVE PANELS TO BE PLACED 2' FROM EDGE OF PATH CENTER OF SIGN TO INTERPRETIVE PANELS. INTERPRETIVE PANELS TO BE PLACED 2' FROM EDGE OF PATH CENTER OF SIGN TO INTERPRETIVE PANELS.

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PROJECT NO. 2024-02

DESIGNED BY: [blank]

DRAWN BY: [blank]

REVIEWED BY: [blank]

DATE: 10/01/2024

SCALE: 1" = 20'

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TRAIL OF TEARS NATIONAL HISTORIC TRAIL AT TUSCUMBIA LANDING

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LAYOUT PLAN

C1101

SHEET 10 OF 25

PROJECT NO 2021-002

DESIGNED BY WH

DRAWN BY CCW

REVIEWED BY BS

DATE 10.02.2023

SCALE

ISSUE

DATE

BY

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HISTORIC TRAIL AT
TUSCUMBIA LANDING

LAYOUT PLAN

SHEET TITLE SHEFFIELD, ALABAMA

SHEET NO. C1104

SHEET 13 OF 25

LAYOUT NOTES

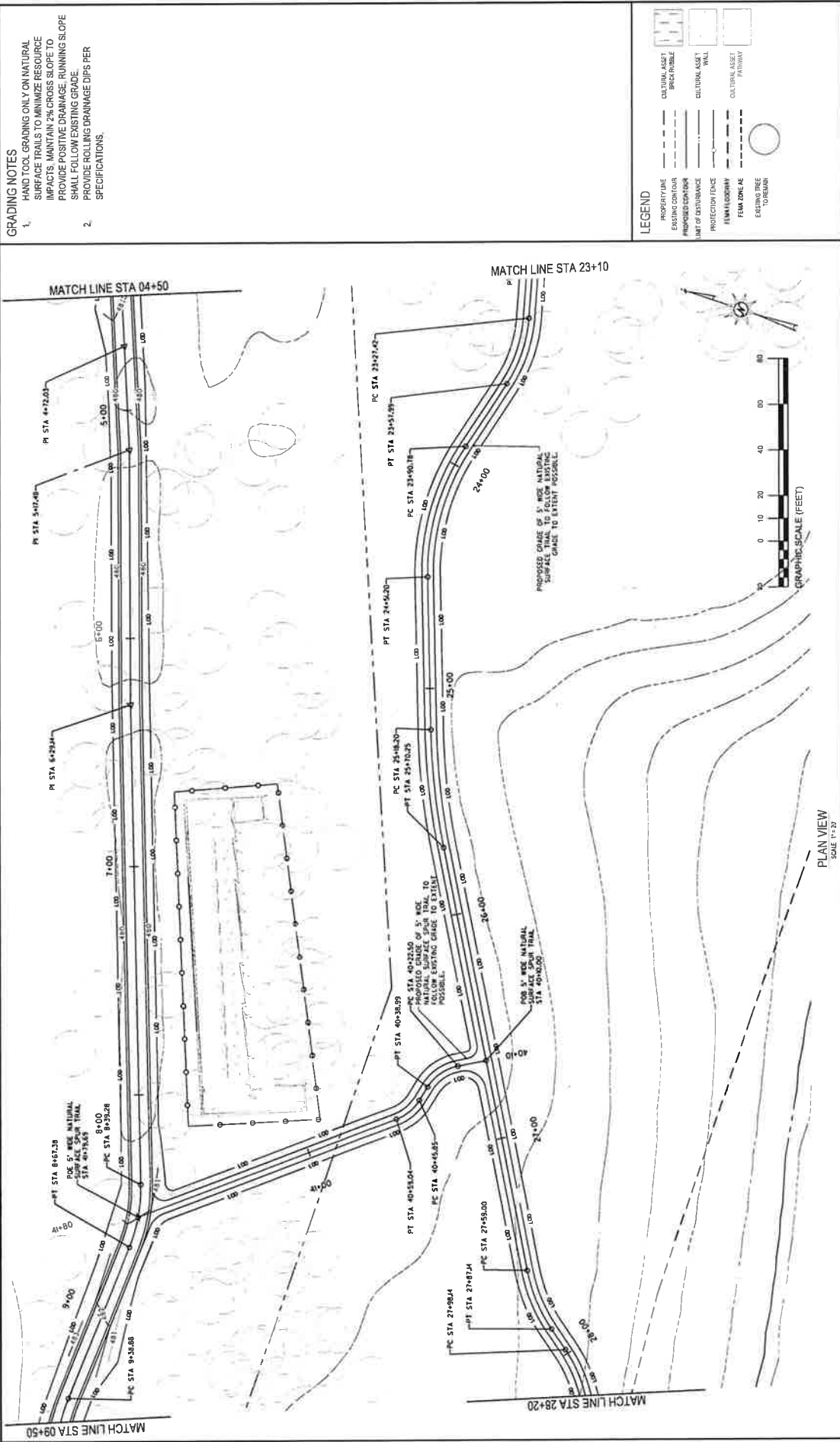
1. ALL TRAIL ALIGNMENTS TO BE FLAGGED IN FIELD PRIOR TO CONSTRUCTION FOR REVIEW AND APPROVAL BY OWNER'S REPRESENTATIVE

2. ARCHAEOLOGY CONSULTANT TO BE PRESENT DURING BOARDWALK FOOTER EXCAVATION AND ANY CLEARING OR GRADING OF THE HISTORIC TRAIL TO ENSURE EXISTING RESOURCES ARE PRESERVED

3. INSTALLATION OF INTERPRETIVE PANELS ALONG THE 8' WIDE CRUSHER PINES PATH TO MEET ADA STANDARDS.

ALIGNMENTS CURVE TABLE

CURVE #	RADIUS	LENGTH	CHORD DIRECTION	START POINT	END POINT	ALIGNMENT
C1	80.000	38.390	S87° 24' 48.37"W	(1901586.2189, 728080.3057)	(1901550.6136, 728087.6069)	ADA ACCESSIBLE CRUSHER PINES TRAIL
C2	80.000	38.884	S87° 04' 54.78"W	(1901432.8722, 728120.7488)	(1901384.4187, 728118.7980)	ADA ACCESSIBLE CRUSHER PINES TRAIL
C3	70.000	26.103	S81° 39' 41.44"W	(1900938.9212, 727951.0771)	(1900811.3013, 727947.0269)	ADA ACCESSIBLE CRUSHER PINES TRAIL
C4	100.000	48.842	S79° 15' 23.75"W	(1900838.9088, 727950.8740)	(1900782.8843, 727942.0138)	ADA ACCESSIBLE CRUSHER PINES TRAIL
C5	300.000	79.240	S57° 47' 00.26"W	(1900788.4170, 727940.5145)	(1900725.5718, 727898.3928)	ADA ACCESSIBLE CRUSHER PINES TRAIL
C6	40.000	43.872	N52° 17' 21.98"W	(1901731.2280, 728163.4224)	(1901658.2264, 728168.3328)	CRUSHER PINES TRAIL PREFERRED ALTERNATIVE ROUTE
C7	400.000	194.153	S82° 23' 05.33"W	(1901668.2284, 728168.9326)	(1901507.6666, 728163.5557)	CRUSHER PINES TRAIL PREFERRED ALTERNATIVE ROUTE



- GRADING NOTES**
- HAND TOOL GRADING ONLY ON NATURAL SURFACE TRAILS TO MINIMIZE RESOURCE IMPACTS. MAINTAIN 2% CROSS SLOPE TO PROVIDE POSITIVE DRAINAGE. RUNNING SLOPE SHALL FOLLOW EXISTING GRADE.
 - PROVIDE ROLLING DRAINAGE DIPS PER SPECIFICATIONS.

LEGEND

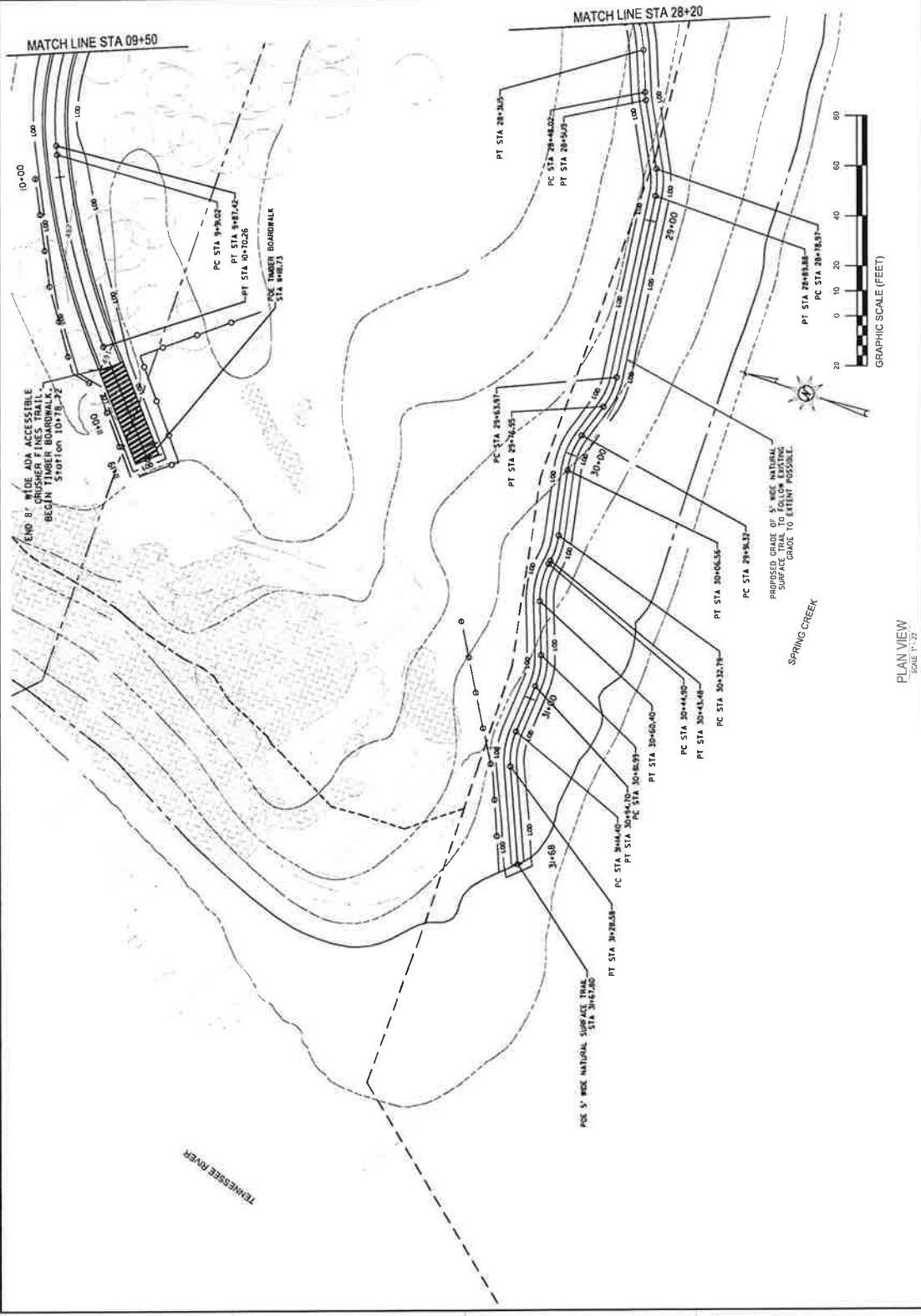
PROPERTY LINE	CULTURAL ASSET
EXISTING CONTOUR	PROPOSED CONTOUR
LIMIT OF DISTURBANCE	CULTURAL ASSET WALL
PROTECTION FENCE	CULTURAL ASSET PATHWAY
TEAM LOCATION	TEAM ZONE AE
EXISTING TREE TO REMAIN	

PROJECT NO. 2021-42	DESIGNED BY: AM	CHECKED BY: BS	DATE: 10/20/2021	SCALE: 1" = 20'
SHEET TITLE: SHEFFIELD, ALABAMA				
SHEET NO. C1106				
GRADING PLAN				
TRAIL OF TEARS NATIONAL HISTORIC TRAIL AT TUSCUMBIA LANDING				
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- GRADING NOTES**
- HAND TOOL GRADING ONLY ON NATURAL SURFACE TRAILS TO MINIMIZE RESOURCE IMPACTS. MAINTAIN 2% CROSS SLOPE TO PROVIDE POSITIVE DRAINAGE. RUNNING SLOPE SHALL FOLLOW EXISTING GRADE.
 - PROVIDE ROLLING DRAINAGE DIPS PER SPECIFICATIONS.

LEGEND

	PROPOSED TRAIL LINE		PROPOSED CONDUIT
	PROPOSED ROADWAY		PROPOSED FENCE
	PROPOSED WALL		PROPOSED TREE
	PROPOSED CULVERT		PROPOSED UTILITY
	PROPOSED PATHWAY		PROPOSED FEATURE



PLAN VIEW
SCALE 1" = 20'

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TRAIL OF TEARS NATIONAL HISTORIC TRAIL AT TUSCUMBIA LANDING

GRADING PLAN

CI107

SHEET NO. 16 OF 25

PROJECT NO. 201-142

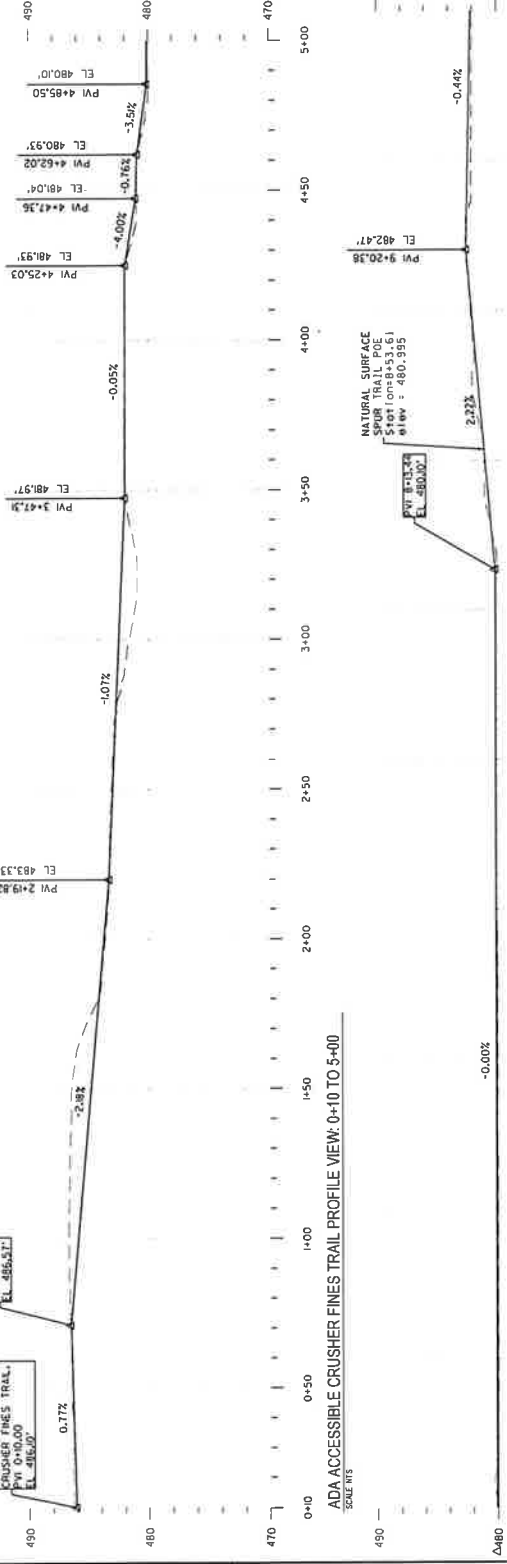
DESIGNED BY CMAN/RY

CHECKED BY CMAN/RY

DATE 12.23.2017

SCALE 1" = 20'

GENERAL NOTES

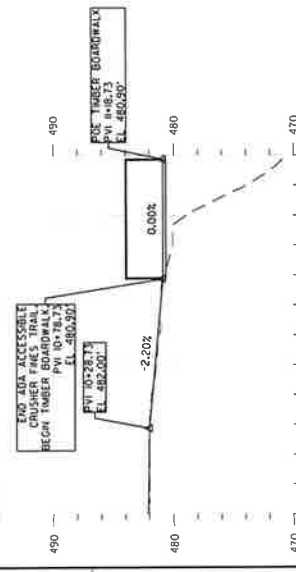


ADA ACCESSIBLE CRUSHER FINES TRAIL PROFILE VIEW: 0+00 TO 5+00

SCALE: NTS

ADA ACCESSIBLE CRUSHER FINES TRAIL PROFILE VIEW: 5+00 TO 10+00

SCALE: NTS



ADA ACCESSIBLE CRUSHER FINES TRAIL PROFILE VIEW: 10+00 TO 11+18.73

SCALE: NTS

PROJECT NO. 227-500
DESIGNER: [blank]
DRAWN BY: [blank]
CHECKED BY: [blank]
DATE: 12/23/21
SCALE: NTS

DATE: [blank]
TIME: [blank]
BY: [blank]
FOR: [blank]

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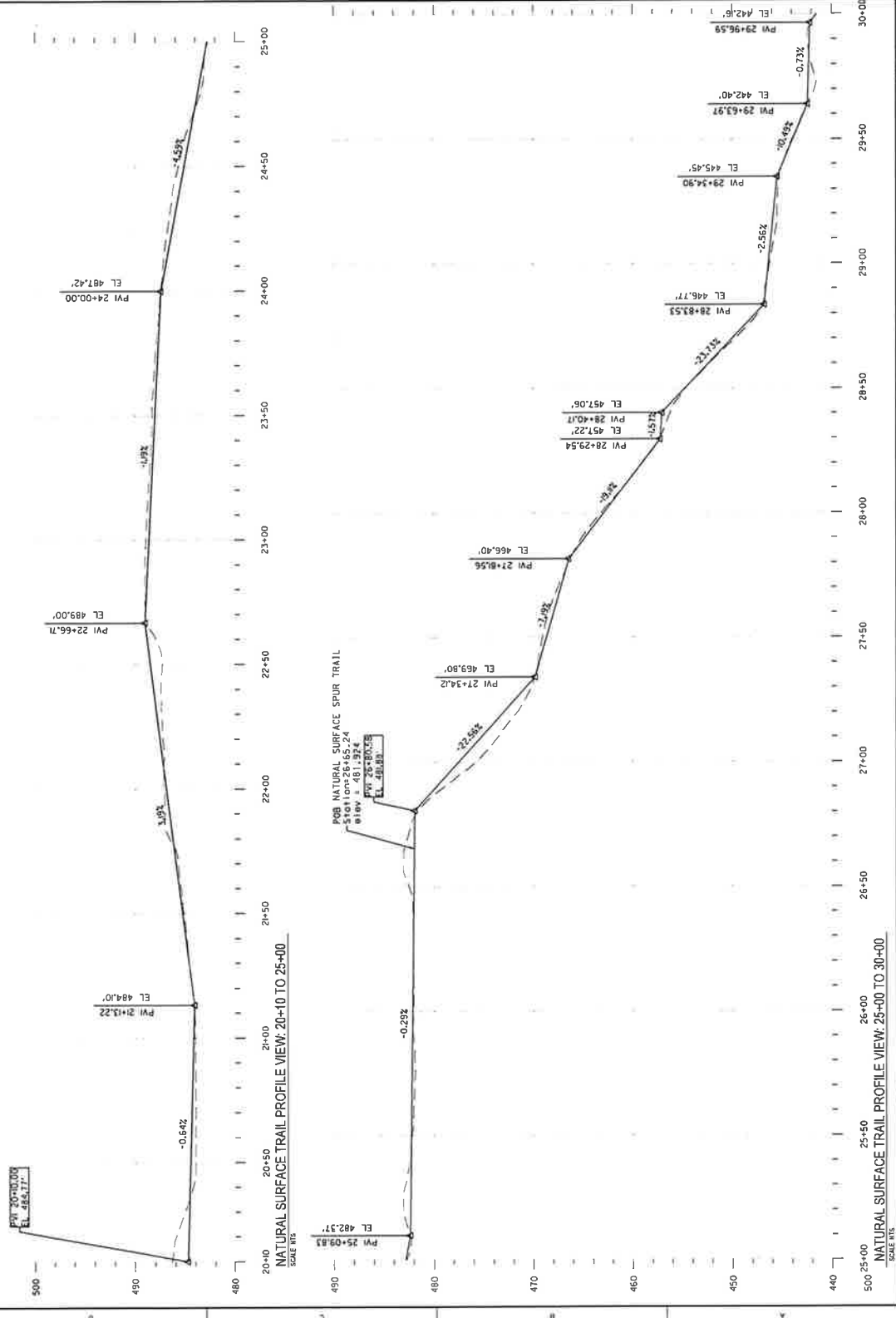
100% DESIGN SUBMISSION

TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

PROFILES

C1108
SHEET 17 OF 25

GENERAL NOTES



PROJECT NO. 2021-042
DESIGNED BY: [blank]
DRAWN BY: [blank]
IN REVIEW: [blank]
DATE: 12/22/21
SCALE: [blank]

811
Know what's below.
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THE KELLY GROUP
14 Peachtree Street, Suite 600 | Atlanta, GA 30303
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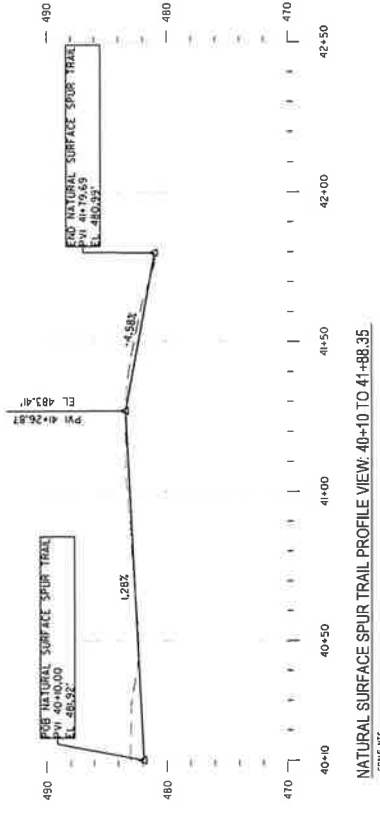
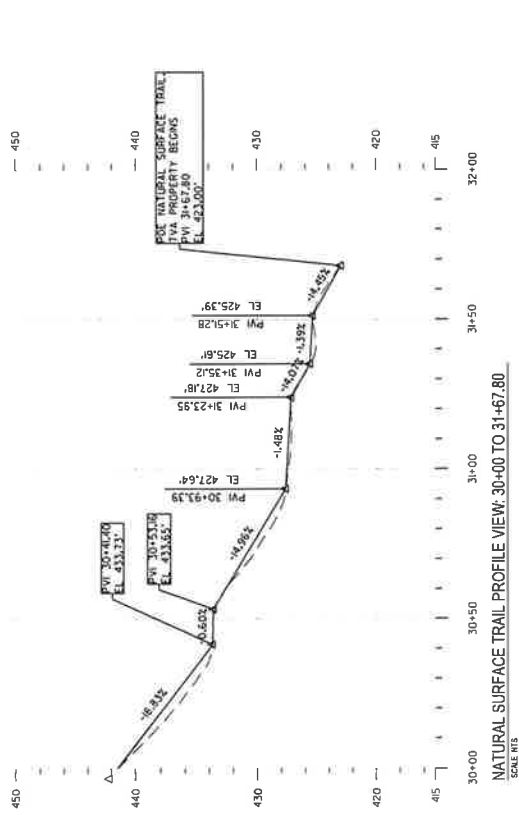
100% DESIGN SUBMISSION


PROFILES

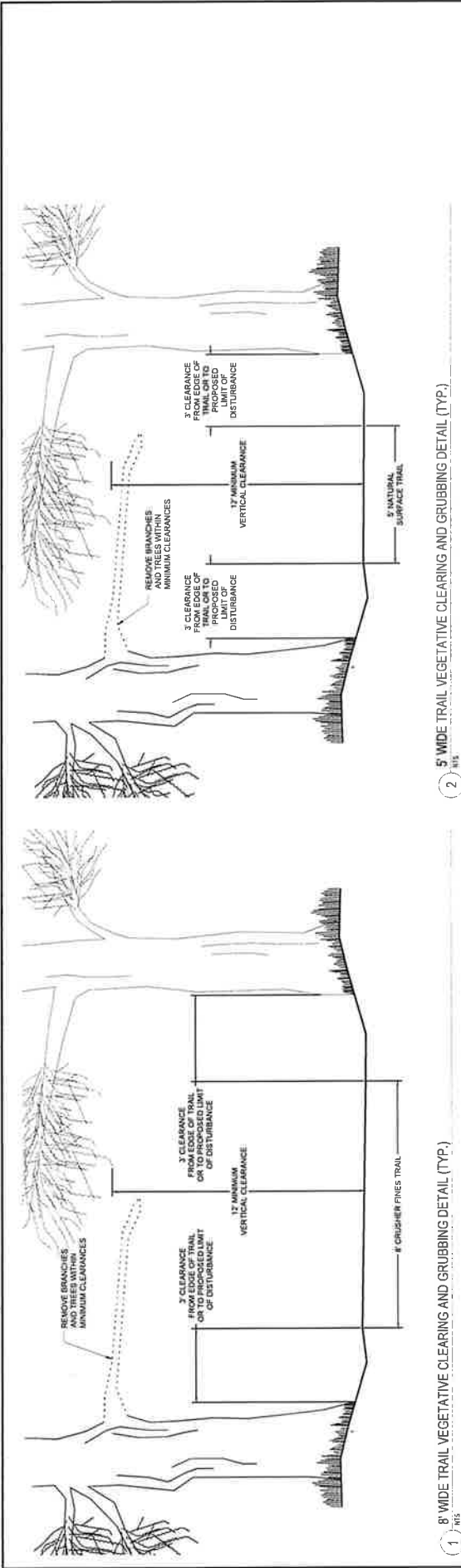
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SHEET 18 OF 25

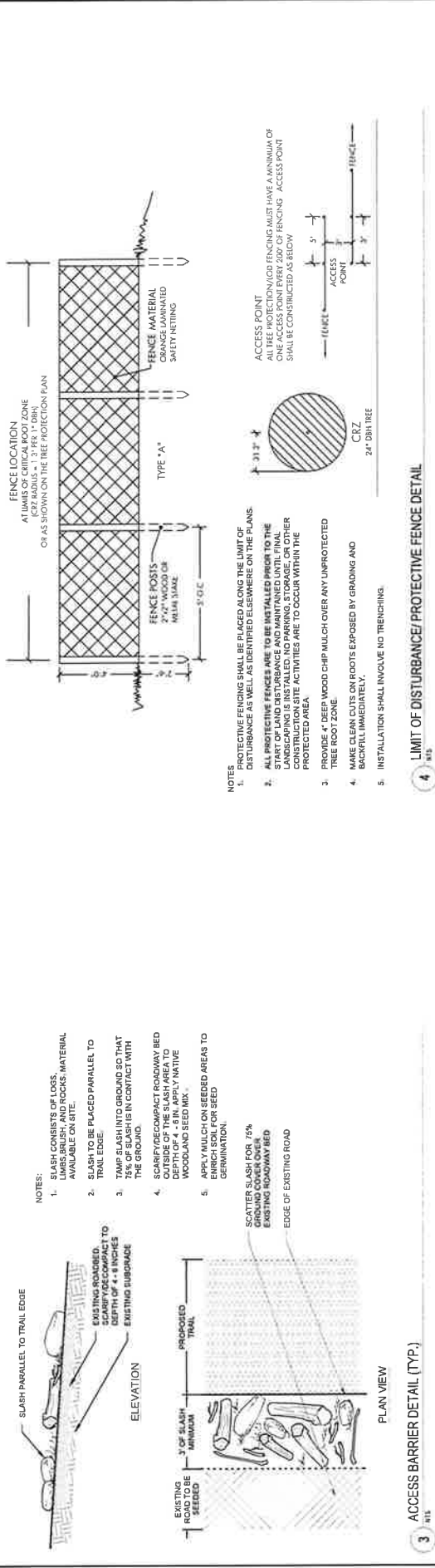
GENERAL NOTES



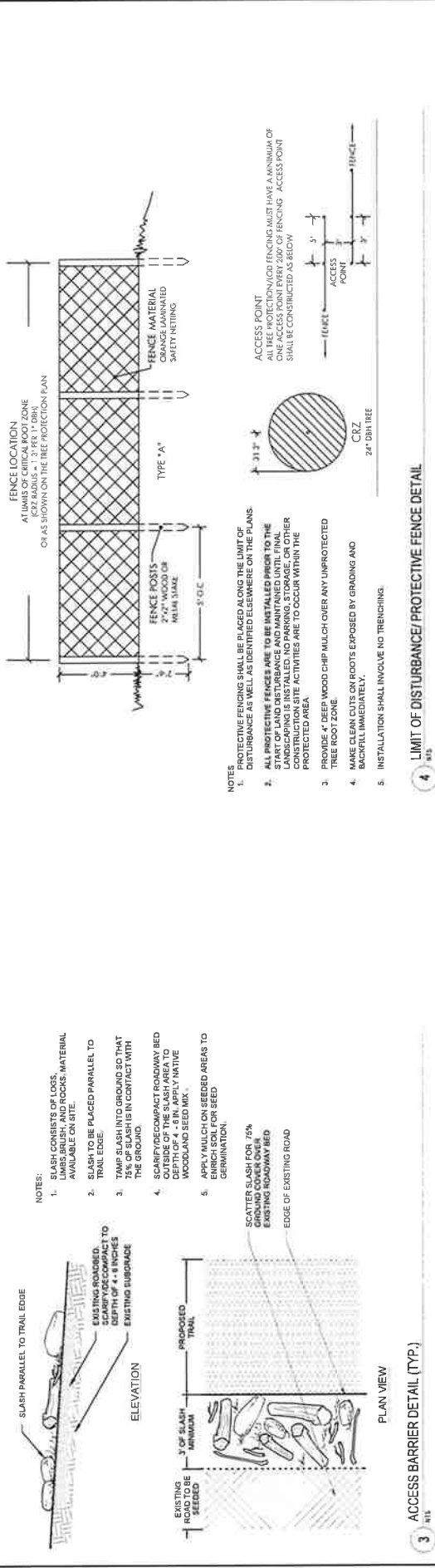
PROJECT NO: 2021-500 DESIGNED BY: JH DRAWN BY: JH REVIEWED BY: JH DATE: 12/22/2021 SCALE: NTS	ISSUE NO. REV. DATE 1 0 12/22/2021	 alta 44 Peachtree Street, Suite 400 Atlanta, GA 30303 404.525.1200 alta.com	100% DESIGN SUBMISSION	TRAIL OF TEARS NATIONAL HISTORIC TRAIL AT TUSCUMBIA LANDING	PROFILES	SHEET NO. C1110 SHEET 18 OF 25
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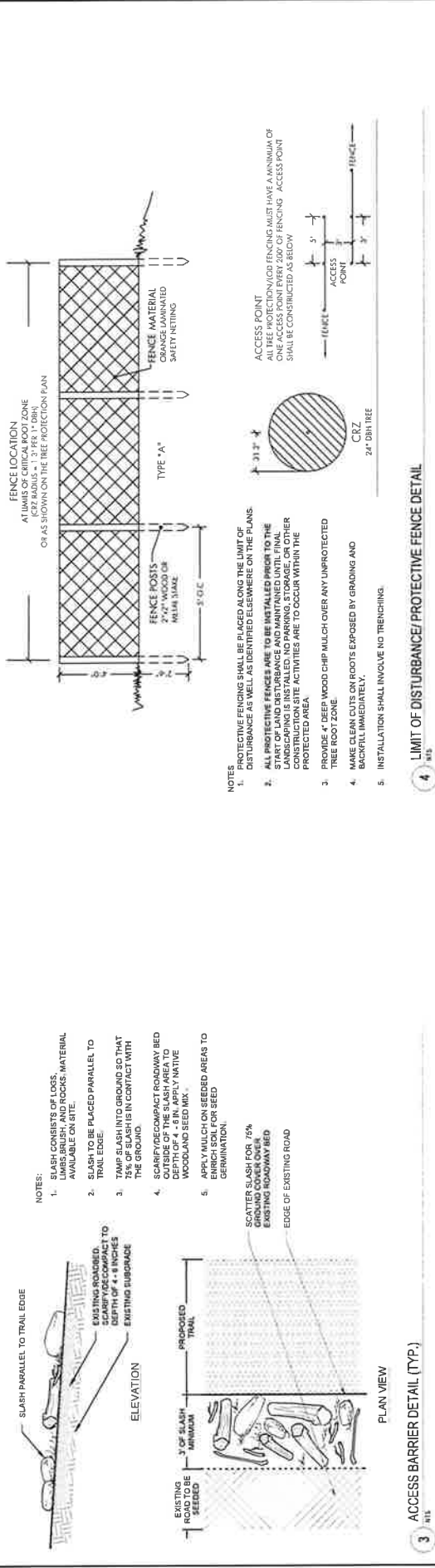
1 8' WIDE TRAIL VEGETATIVE CLEARING AND GRUBBING DETAIL (TYP.)



2 5' WIDE TRAIL VEGETATIVE CLEARING AND GRUBBING DETAIL (TYP.)



3 ACCESS BARRIER DETAIL (TYP.)



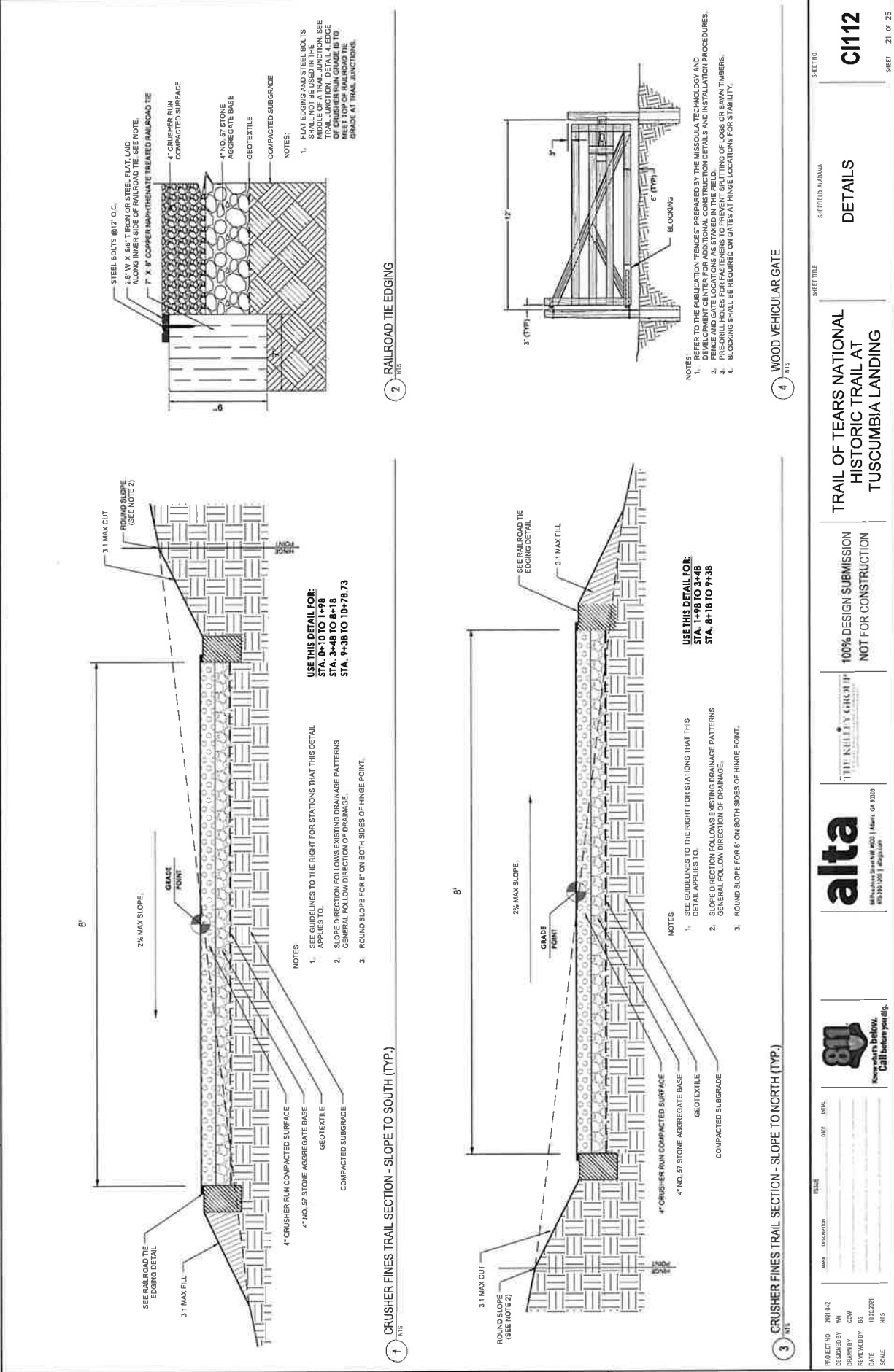
4 LIMIT OF DISTURBANCE/PROTECTIVE FENCE DETAIL

NOTES:

1. PROTECTIVE FENCING SHALL BE PLACED ALONG THE LIMIT OF DISTURBANCE AS WELL AS IDENTIFIED ELSEWHERE ON THE PLANS.
2. ALL PROTECTIVE FENCES ARE TO BE INSTALLED PRIOR TO THE START OF LAND DISTURBANCE AND MAINTAINED UNTIL FINAL LANDSCAPING IS INSTALLED. NO PARKING, STORAGE, OR OTHER CONSTRUCTION SITE ACTIVITIES ARE TO OCCUR WITHIN THE PROTECTED AREA.
3. PROVIDE 4" DEEP WOOD CHIP MULCH OVER ANY UNPROTECTED TREE ROOT ZONE.
4. MAKE CLEAN CUTS ON ROOTS EXPOSED BY GRADING AND BACKFILL IMMEDIATELY.
5. INSTALLATION SHALL INVOLVE NO TRENCHING.

ACCESS POINT
ALL THE PROTECTIVE FENCES MUST HAVE A MINIMUM OF 3' CLEARANCE FROM THE TRAIL OR TO THE LIMIT OF DISTURBANCE. ACCESS POINT SHALL BE CONSTRUCTED AS BELOW

CRZ
24" DBH TREE



PROJECT NO. 201-542
DESIGNED BY WH
DRAWN BY CDM
REVIEWED BY BS
DATE 10/22/2021
SCALE NTS

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(775) 784-1100 | alta.com

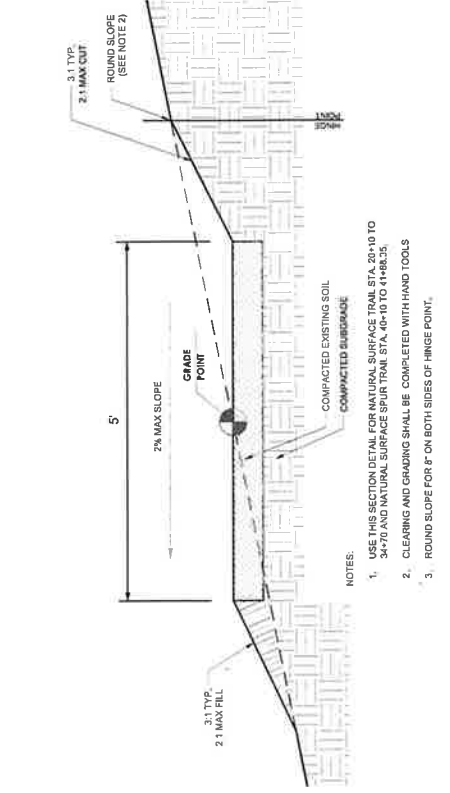
THE KULLITY GROUP
100% DESIGN SUBMISSION
NOT FOR CONSTRUCTION

TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

DETAILS

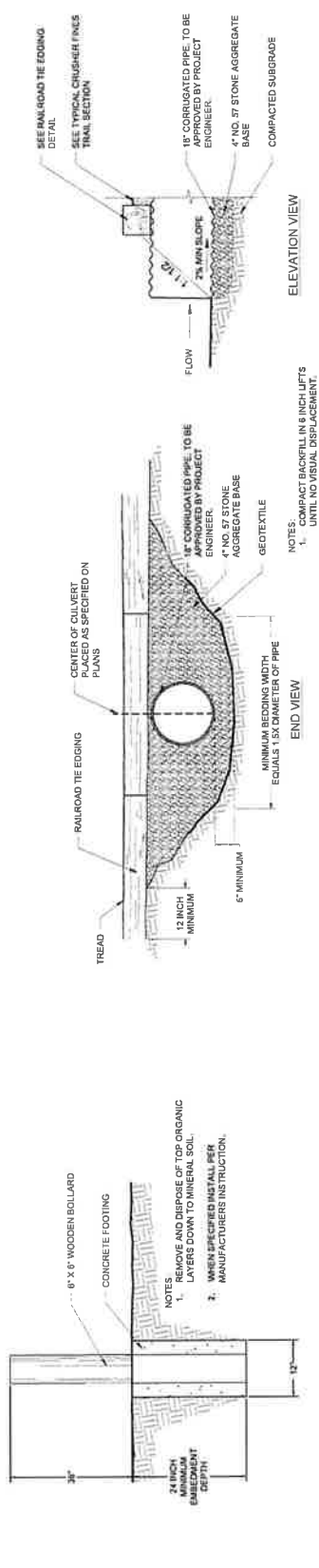
C1112

SHEET NO. SHEET 21 OF 25



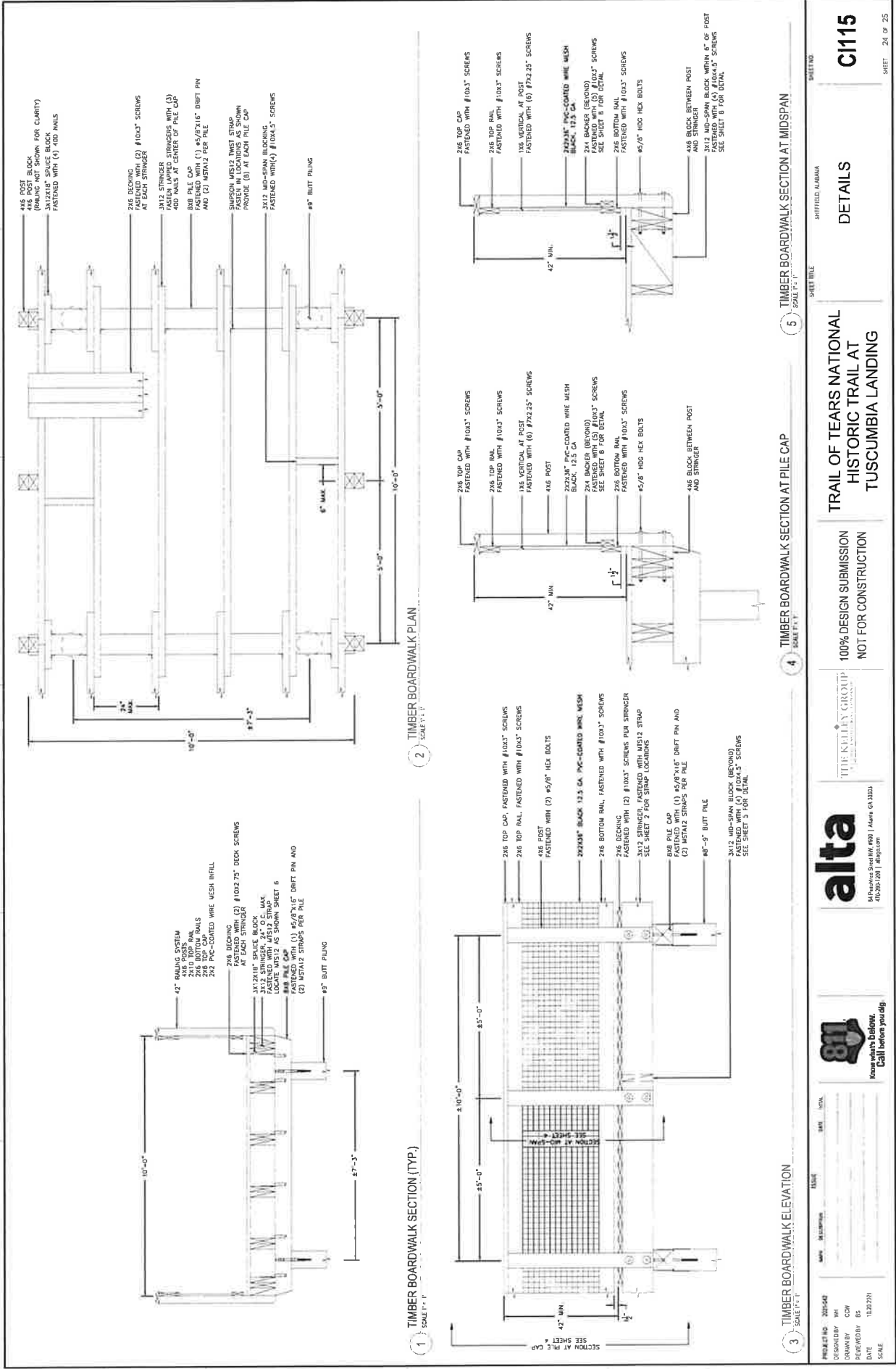
NATURAL SURFACE TRAIL SECTION (TYP.)

TRAIL JUNCTION DETAIL (TYP.)



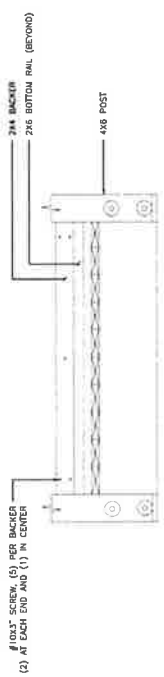
3 BOLLARD DETAIL (TYP.)

CULVERT DETAIL



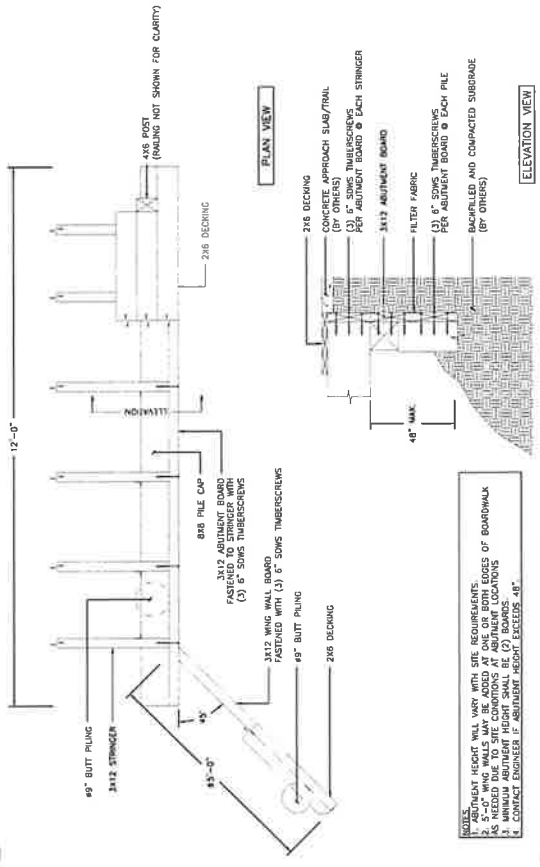


MID-SPAN BLOCK DETAIL



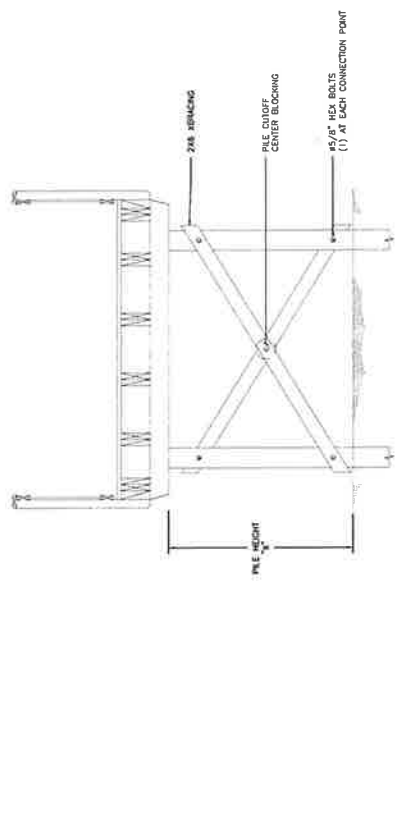
2X4 BACKER CONNECTION

1
TIMBER BOARDWALK RAILING DETAILS (TYP.)
SCALE 1" = 1'



NOTES:
1. ABUTMENT HEIGHT WILL VARY WITH SITE REQUIREMENTS.
2. 5'-0" WING WALLS MAY BE ADDED AT ONE OR BOTH EDGES OF BOARDWALK AS NEEDED DUE TO SITE CONDITIONS AT ABUTMENT LOCATIONS.
3. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
4. CONTACT ENGINEER IF ABUTMENT HEIGHT EXCEEDS 45'.

3
TIMBER BOARDWALK ABUTMENT DETAILS
SCALE 1" = 1'



FOR BRACE CONNECTION:
1. IF HEIGHT "X" IS GREATER THAN 6'-0", INSTALL X-BRACING IN TRANSVERSE DIRECTION.
2. IF HEIGHT "X" IS GREATER THAN 10'-0", INSTALL X-BRACING IN LONGITUDINAL DIRECTION IN EVERY OTHER BAY.

2
TIMBER BOARDWALK XBRACE DETAIL (TYP.)
SCALE 1" = 1'

PROJECT NO. 2015-02
DESIGNED BY: [blank]
DRAWN BY: [blank]
CHECKED BY: [blank]
DATE: 11/20/20
SCALE: [blank]



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NOT FOR CONSTRUCTION

TRAIL OF TEARS NATIONAL
HISTORIC TRAIL AT
TUSCUMBIA LANDING

SMITH TRAIL
SMITHFIELD, ALABAMA

DETAILS

C1116

SHEET 25 OF 25

December 13, 2018

JS18-123

TO: City of Sheffield

ATTENTION: Steve Stanley

RE: Environmental Consulting Services for
Tuscumbia Landing Project (approximately 55 acre site)
Wetlands and Streams Assessment
Sheffield, Alabama / Colbert County

Mr. Stanley:

AST Environmental (AST) has completed a wetlands and streams assessment for the referenced project. The project boundary was provided to AST in an email received on October 24, 2018. The site is located in Sheffield, Alabama. The assessment area includes 55 acres and is situated east of the Tennessee River / Spring Creek confluence and west of Blackwell Road. See Site Map.

Site

The majority of the site consists of rolling to steep uplands under a mixed hardwood canopy. Dominant tree species include: various species of oak and hickory, sweetgum, hackberry, magnolia, walnut and Chinese privet. The majority of the site has a fairly open canopy and midstory. Portions of the site are dense and choked with Chinese privet (*Ligustrum sinense*). A small, terraced field is situated in the northeastern portion of the assessment area. Dominant herbaceous vegetation within the field includes: broomsedge, fescue, yellow bristle-grass, bermuda grass and young pine trees.

Wetlands

AST's wetland assessment consisted of in-house review of the *U.S. Army Corps of Engineers, 2014 National Wetland Plant List*, *U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey of Colbert County, Alabama*, review of available topographic and aerial photographs, and a field reconnaissance.

Following the information review, AST performed field assessments to identify and delineate wetlands using the "Routine On-Site Determination Method" as defined in the *1987 USACE Wetlands Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0)*. This technique uses a multi-parameter approach for defining wetlands, which requires positive evidence of three criteria including: a prevalence of hydrophytic vegetation, presence of hydric soils and presence of wetland hydrology.

Wetlands were not observed or delineated within the assessment area. Four areas appearing to have wetland characteristic were observed on site. Although these areas appeared characteristic of wetlands, they did not meet wetland criteria and were documented as Upland Data Points U-1, U-2, U-3 and U-4. See Upland Data Sheets (U-1 through U-4), Data Point Location Map, and Photographs (24-27).

Hydric soils are not mapped on site by the USDA – NRCS. The soils mapped on site include: Decatur-Urban land complex (2-8 percent slopes, well drained), Fullerton gravelly silt loam (2-15 percent slopes, well drained) and Fullerton-Bodine complex (15-45 percent slopes, well drained). An NRCS Soils Information packet is attached for your review.

Streams

AST performed field assessments using the “*North Carolina Division of Water Quality Methodology for Identification of Intermittent and Perennial Streams and Their Origins*” to evaluate and score on-site streams as ephemeral, intermittent or perennial. A handheld global positioning unit (GPS) was used to delineate on-site streams and features. Features were documented and flagged with plastic survey tape.

One stream (Stream S-1) is located on site. S-1 (2,390 linear feet on site) is an unnamed intermittent tributary to Spring Creek. It drains to the southwest and empties into Spring Creek. S-1 is mapped by the United States Geological Survey (USGS) as a blue-line stream. Throughout its reach, S-1 became subsurface and dry in many locations. On site, portions of S-1 had surface water with little flow. Additionally, portions of S-1 had standing water with no flow. S-1, where wet, was generally very shallow (a few inches or less). The majority of S-1 has a deeply incised bed with steep, eroding banks. The lower reach of S-1 was ponded with backwater from Spring Creek. Spring Creek was at top-of-bank during the assessment due to the amount of rainfall within the week prior to the assessment. See Stream Identification Form S-1, Stream Features Maps, and Photographs 1-4.

Ten ephemeral drainage features are present on site. Linear footages, location coordinates, and stream characteristics of each ephemeral drainage feature are presented in Table 1. See Table 1, Stream Features Maps and Photographs 5-23.

Table 1, a series of Maps, Upland Data Sheets (U-1 through U-4), Stream Identification Sheet S-1, an NRCS Information Packet, and a Site Photograph Log are attached for your review. Written concurrence with the findings of this report should be obtained from the United States Army Corps of Engineers (USACE) prior to implementation of the proposed project. If you should have questions or require additional information, please feel free to contact me at (256) 303-7054 or Jeff Selby at (256) 476-7355.

Sincerely,

AST Environmental



Michael McConnell
Environmental Scientist



Jeff Selby, M.S.
Senior Biologist / Member

Attachments:

TABLES

Table 1. Stream or drainage features located on the 55 acre site. Inspiration Landing project.
Sheffield, Colbert County, AL. December 11-12, 2018.

Drainage Feature	Linear Feet	Latitude	Longitude	USGS Blue-Line Mapped	Wet During Assessment
S-1	2,390	34.74753	-87.72009	Yes	Partially
F-1	170	34.74717	-87.71858	No	No
F-2a	130	34.74788	-87.71721	No	No
F-2b	230	34.74787	-87.71656	No	No
F-3	230	34.74933	-87.71579	No	Partially
F-4	410	34.75003	-87.71711	No	No
F-5	330	34.74953	-87.72271	No	No
F-6a	1,000	34.75006	-87.72136	No	No
F-6b	315	34.74944	-87.72043	No	No
F-7a	770	34.74895	-87.71902	No	No
F-7b	130	34.74857	-87.71848	No	No

WETLAND / UPLAND DATA SHEETS

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site: JS18-123 City/County: Sheffield / Colbert Sampling Date: 12/11/18
 Applicant/Owner: City of Sheffield State: AL Sampling Point: U-1
 Investigator(s): MJM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local Relief (concave, convex, none): concave Slope (%): <5
 Subregion (LRR or MLRA): LRRN Lat: 34.747396 Long: -87.719765 Datum: WGS84
 Soil Map Unit Name: DeB; Decatur - Urban land complex NWI Classification: PF01A
 Are climatic / hydrologic conditions on this site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are normal circumstances present? Yes ☒ No _____
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (if needed, explain any answers in Remarks.) _____

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____
 Hydric Soils present? Yes _____ No ☒
 Wetland Hydrology Present? Yes _____ No ☒

Is the Sampled Area within a Wetland? Yes _____ No ☒

Remarks:

U-1 data point location is a riparian terrace.

HYDROLOGY
Wetland Hydrology Indicators:
Primary Indicators (minimum of one is required; check all that apply)

☐ Surface Water (A1) ☐ True Aquatic Plants (B14)
☐ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1)
☐ Saturation (A3) ☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Water Marks (B1) ☐ Presence of Reduced Iron (C4)
☐ Sediment Deposits (B2) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Drift Deposits (B3) ☐ Thin Muck Surface (C7)
☐ Algal Mat or Crust (B4) ☐ Other (Explain in Remarks)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)

Secondary Indicators (minimum of two required)

☐ Surface Soil Cracks (C6)
☐ Sparsely Vegetated Concave Surface (B8)
☐ Drainage Patterns (B10)
☐ Moss Trim Lines (B16)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ Microtopographic Relief (D4)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____

Water table Present? Yes _____ No ☒ Depth (inches): _____

Saturation Present? Yes _____ No ☒ Depth (inches): _____
 (Includes capillary fringe)

Wetland Hydrology Present?

Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology is not present at U-1 data point location.
 Wetland indicators are not present at U-1 data point location.

VEGETATION (Four Strata) - Use scientific names of plants.

 Sampling point: U-1

	Indicator Status	Absolute % Cover	Dominant Species		
Tree Stratum (30' diameter plot)					
1. <i>Liquidambar styraciflua</i>	FAC	30	Y	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC (A) <u>5</u> Total Number of Dominant Species Across All Strata (B) <u>9</u> Percent of Dominant Species That Are OBL, FACW, or FAC (A) <u>55.6</u> %	
2. <i>Celtis occidentalis</i>	FACU	20	Y		
3. <i>Quercus nigra</i>	FAC	20	Y		
4. <i>Acer negundo</i>	FAC	10	N		
5. <i>Ligustrum sinense</i>	FACU	5	N		
6.					
7.					
85 = Total Cover					
50% of total cover: <u>42.5</u>		20% of total cover: <u>17</u>			
Sapling/Shrub Stratum (15' diameter plot)					
1. <i>Ligustrum sinense</i>	FACU	60	Y	Prevalence Index Worksheet Total % Cover of: Multiply by: OBL Species 0 x 1 = 0 FACW Species 0 x 2 = 0 FAC Species 5 x 3 = 15 FACU Species 4 x 4 = 16 UPL Species 0 x 5 = 0 Column Totals: 9 A 31 B Prevalence Index = B / A = 3.4	
2. <i>Ilex verticillata</i>	FACW	10	N		
3. <i>Ulmus rubra</i>	FAC	10	N		
4.					
5.					
6.					
7.					
8.					
9.					
80 = Total Cover					
50% of total cover: <u>40</u>		20% of total cover: <u>16</u>			
Herb Stratum (5' diameter plot)					
1. <i>Viola sagittata</i>	FAC	30	Y	Hydrophytic Vegetation Indicators: 1. Rapid Test for Hydrophytic Veg. <u>X</u> 2. Dominance Test is >50% 3. Prevalence Index is ≤ 3.0 * 4. Morphological adaptations * (Provide supporting data) Problematic Hydrophytic Veg. (Explain) * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or <u>problematic</u> .	
2. <i>Viola hirsutula</i>	FACU	20	Y		
3. <i>Ligustrum sinense</i>	FACU	10	N		
4. <i>Ilex verticillata</i>	FACW	10	N		
5. <i>Smilax rotundifolia</i>	FAC	5	N		
6.					
7.					
8.					
9.					
10.					
11.					
75 = Total Cover					
50% of total cover: <u>47.5</u>		20% of total cover: <u>15</u>			
Woody Vine Stratum (30' diameter plot)					
1. <i>Toxicodendron radicans</i>	FAC	30	Y	Definitions of Four Vegetation Strata: Tree - ≥ 3in. (7.6 cm) DBH Sapling/Shrub - < 3in. DBH and > 3.28 ft. (1 m) tall Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants < 3.28 ft. tall Woody vine - All woody vines > 3.28 ft. in height	
2. <i>Smilax rotundifolia</i>	FAC	30	Y		
3.					
4.					
5.					
60 = Total Cover					
50% of total cover: <u>30</u>		20% of total cover: <u>12</u>			
Hydrophytic Vegetation Present? Yes <u>X</u> No _____					
Remarks: (Include photo numbers here or on a separate sheet.) A dominance of hydrophytic vegetation is present at U-1 data point location. Facultative vegetation dominance test is greater than 50%, at 55.6%. Facultative vegetation prevalence index is not less than 3.0, at 3.4.					

SOIL

Sampling point: U-1

Profile Description: (Describe to the depth needed to document the indicator or or confirm the absence of indicators.)

[illegible]

* Type: C=Concretion, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains ** Location: PL=Pore Lining, M=Matrix

Hydric Soils Indicators:

Indicators of Problematic Hydric Soils ***

- | | | |
|---|---|---|
| <input type="checkbox"/> Histosols (A1) | <input type="checkbox"/> Dark Surfaces (S7) | <input type="checkbox"/> 2 cm muck (A10) (MLRA 147) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148) | <input type="checkbox"/> Coast Prairie Redox (A16) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148) | <input type="checkbox"/> (MLRA 147, 148) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> (MLRA 136, 147) |
| <input type="checkbox"/> 2 cm Muck (A10) (LRR N) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sandy Mucky Minerals (S1) (LRR N, MLRA 147, 148) | <input type="checkbox"/> Iron-Manganese Masses (F-12) (LRR N, MLRA 136) | <input type="checkbox"/> *** Indicators of hydrophytic vegetation |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122) | <input type="checkbox"/> wetland hydrology must be present |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148) | <input type="checkbox"/> unless disturbed or problematic. |
| <input type="checkbox"/> Stripped Matrix (S6) | | |

*** Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soils present ?

Yes _____
No X

Remarks:

Hydric soils are not present at U-1 data point location.

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site: JS18-123 City/County: Sheffield / Colbert Sampling Date: 12/11/18
 Applicant/Owner: City of Sheffield State: AL Sampling Point: U-2
 Investigator(s): MJM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): ephemeral Local Relief (concave, convex, none): concave Slope (%): <5
 Subregion (LRR or MLRA): LRRN Lat: 34.747922 Long: -87.721028 Datum: WGS84
 Soil Map Unit Name: DeB; Decatur - Urban land complex NWI Classification: none
 Are climatic / hydrologic conditions on this site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are normal circumstances present? Yes ☒ No _____
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (if needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soils present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: U-2 data point location is within a draw along an ephemeral drainage.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)		<input type="checkbox"/> Surface Soil Cracks (C6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (Includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Wetland hydrology is not present at U-2 data point location. Wetland indicators are not present at U-2 data point location.		

VEGETATION (Four Strata) - Use scientific names of plants.

 Sampling point: U-2

	Indicator Status	Absolute % Cover	Dominant Species	
Tree Stratum (30' diameter plot)				
1. <i>Liquidambar styraciflua</i>	FAC	40	Y	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC (A) <u>5</u> Total Number of Dominant Species Across All Strata (B) <u>8</u> Percent of Dominant Species That Are OBL, FACW, or FAC (A) <u>62.5</u> %
2. <i>Celtis occidentalis</i>	FACU	30	Y	
3. <i>Quercus nigra</i>	FAC	15	Y	
4. <i>Ligustrum sinense</i>	FACU	5	N	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
90 = Total Cover				
50% of total cover: <u>45</u>		20% of total cover: <u>18</u>		
Sapling/Shrub Stratum (15' diameter plot)				
1. <i>Ligustrum sinense</i>	FACU	60	Y	Prevalence Index Worksheet Total % Cover of: Multiply by: OBL Species <u>0</u> x 1 = <u>0</u> FACW Species <u>0</u> x 2 = <u>0</u> FAC Species <u>5</u> x 3 = <u>15</u> FACU Species <u>3</u> x 4 = <u>12</u> UPL Species <u>0</u> x 5 = <u>0</u> Column Totals: <u>8</u> A <u>27</u> B Prevalence Index = B / A = <u>3.4</u>
2. <i>Ilex opaca</i>	FACU	20	N	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
80 = Total Cover				
50% of total cover: <u>40</u>		20% of total cover: <u>16</u>		
Herb Stratum (5' diameter plot)				
1. <i>Ligustrum sinense</i>	FACU	20	Y	Hydrophytic Vegetation Indicators: 1. Rapid Test for Hydrophytic Veg. _____ X 2. Dominance Test is >50% _____ 3. Prevalence Index is ≤ 3.0 * _____ 4. Morphological adaptations * _____ (Provide supporting data) Problematic Hydrophytic Veg. _____ (Explain) _____ * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <i>Smilax rotundifolia</i>	FAC	15	Y	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
35 = Total Cover				
50% of total cover: <u>17.5</u>		20% of total cover: <u>7</u>		
Woody Vine Stratum (30' diameter plot)				
1. <i>Toxicodendron radicans</i>	FAC	35	Y	Definitions of Four Vegetation Strata: Tree - ≥ 3in. (7.6 cm) DBH Sapling/Shrub - < 3in. DBH and > 3.28 ft. (1 m) tall Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants < 3.28 ft. tall Woody vine - All woody vines > 3.28 ft. in height
2. <i>Smilax rotundifolia</i>	FAC	25	Y	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
60 = Total Cover				
50% of total cover: <u>30</u>		20% of total cover: <u>12</u>		
				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
Remarks: (Include photo numbers here or on a separate sheet.) A dominance of hydrophytic vegetation is present at U-2 data point location. Facultative vegetation dominance test is greater than 50%, at 62.5%. Facultative vegetation prevalence index is not less than 3.0, at 3.4.				

SOIL

Sampling point: U-2

Profile Description: (Describe to the depth needed to document the indicator or or confirm the absence of indicators.)

[illegible]

* Type: C=Concretion, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains ** Location: PL=Pore Lining, M=Matrix

Hydric Soils Indicators:

Indicators of Problematic Hydric Soils ***

<input type="checkbox"/> Histosols (A1)	<input type="checkbox"/> Dark Surfaces (S7)	<input type="checkbox"/> 2 cm muck (A10) (MLRA 147)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148)	<input type="checkbox"/> (MLRA 147, 148)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> (MLRA 136, 147)
<input type="checkbox"/> 2 cm Muck (A10) (LRR N)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sandy Mucky Minerals (S1) (LRR N, MLRA 147, 148)	<input type="checkbox"/> Iron-Manganese Masses (F-12) (LRR N, MLRA 136)	<input type="checkbox"/> *** Indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122)	<input type="checkbox"/> wetland hydrology must be present
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148)	<input type="checkbox"/> unless disturbed or problematic.
<input type="checkbox"/> Stripped Matrix (S6)		

*** Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soils present ?

Yes _____
No X

Remarks:

Hydric soils are not present at U-2 data point location.

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site: JS17-116 City/County: Sheffield / Colbert Sampling Date: 12/12/18
 Applicant/Owner: Engineering Design Technologies, Inc. (EDT) State: AL Sampling Point: U-3
 Investigator(s): MJM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): hillslope Local Relief (concave, convex, none): concave Slope (%): <8
 Subregion (LRR or MLRA): LRRN Lat: 34.749292 Long: -87.719035 Datum: WGS84
 Soil Map Unit Name: FaD; Fullerton gravelly silt loam NWI Classification: none
 Are climatic / hydrologic conditions on this site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are normal circumstances present? Yes X No _____
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (if needed, explain any answers in Remarks.) _____

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soils present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: U-3 data point location is within a draw between ridges.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (C6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (Includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Wetland hydrology is not present at U-3 data point location. Wetland indicators are not present at U-3 data point location.		

VEGETATION (Four Strata) - Use scientific names of plants.

 Sampling point: U-3

	Indicator Status	Absolute % Cover	Dominant Species	
Tree Stratum (30' diameter plot)				
1. <i>Acer negundo</i>	FAC	30	Y	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC (A) <u>7</u> Total Number of Dominant Species Across All Strata (B) <u>8</u> Percent of Dominant Species That Are OBL, FACW, or FAC (A) <u>87.5</u> %
2. <i>Quercus nigra</i>	FAC	20	Y	
3. <i>Carya lacinosa</i>	FAC	20	Y	
4. <i>Liquidambar styraciflua</i>	FAC	10	N	
5. <i>Aesculus pavia</i>	FAC	5	N	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		85 = Total Cover		
50% of total cover: <u>42.5</u>		20% of total cover: <u>17</u>		
Sapling/Shrub Stratum (15' diameter plot)				
1. <i>Ligustrum sinense</i>	FACU	60	Y	Prevalence Index Worksheet Total % Cover of: Multiply by: OBL Species <u>0</u> x 1 = <u>0</u> FACW Species <u>0</u> x 2 = <u>0</u> FAC Species <u>7</u> x 3 = <u>21</u> FACU Species <u>1</u> x 4 = <u>4</u> UPL Species <u>0</u> x 5 = <u>0</u> Column Totals: <u>8</u> A <u>25</u> B Prevalence Index = B / A = <u>3.1</u>
2. <i>Aesculus pavia</i>	FAC	15	N	
3. <i>Liquidambar styraciflua</i>	FAC	10	N	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
		85 = Total Cover		
50% of total cover: <u>42.5</u>		20% of total cover: <u>17</u>		
Herb Stratum (5' diameter plot)				
1. <i>Toxicodendron radicans</i>	FAC	15	Y	Hydrophytic Vegetation Indicators: 1. Rapid Test for Hydrophytic Veg. _____ X 2. Dominance Test is >50% _____ 3. Prevalence Index is ≤ 3.0 * _____ 4. Morphological adaptations * _____ (Provide supporting data) Problematic Hydrophytic Veg. _____ (Explain) _____ * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <i>Campsis radicans</i>	FAC	10	Y	
3. <i>Athyrium asplenoides</i>	FAC	5	N	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
		30 = Total Cover		
50% of total cover: <u>15</u>		20% of total cover: <u>6</u>		
Woody Vine Stratum (30' diameter plot)				
1. <i>Toxicodendron radicans</i>	FAC	15	Y	Definitions of Four Vegetation Strata: Tree - ≥ 3in. (7.6 cm) DBH Sapling/Shrub - < 3in. DBH and > 3.28 ft. (1 m) tall Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants < 3.28 ft. tall Woody vine - All woody vines > 3.28 ft. in height
2. <i>Smilax rotundifolia</i>	FAC	10	Y	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
		25 = Total Cover		
50% of total cover: <u>12.5</u>		20% of total cover: <u>5</u>		
				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
Remarks: (Include photo numbers here or on a separate sheet.) A dominance of hydrophytic vegetation is present at U-3 data point location. Facultative vegetation dominance test is greater than 50%, at 87.5%. Facultative vegetation prevalence index is not less than 3.0, at 3.1.				

SOIL

Sampling point: U-3

Profile Description: (Describe to the depth needed to document the indicator or or confirm the absence of indicators.)

[illegible]

* Type: C=Concretion, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains ** Location: PL=Pore Lining, M=Matrix

Hydric Soils Indicators:

Indicators of Problematic Hydric Soils ***

- | | | |
|---|---|---|
| <input type="checkbox"/> Histosols (A1) | <input type="checkbox"/> Dark Surfaces (S7) | <input type="checkbox"/> 2 cm muck (A10) (MLRA 147) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148) | <input type="checkbox"/> Coast Prairie Redox (A16) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148) | <input type="checkbox"/> (MLRA 147, 148) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> (MLRA 136, 147) |
| <input type="checkbox"/> 2 cm Muck (A10) (LRR N) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sandy Mucky Minerals (S1) (LRR N, MLRA 147, 148) | <input type="checkbox"/> Iron-Manganese Masses (F-12) (LRR N, MLRA 136) | *** Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122) | |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148) | |
| <input type="checkbox"/> Stripped Matrix (S6) | | |

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soils present ?

Yes _____
No X

Remarks:

Hydric soils are not present at U-3 data point location.

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site: JS17-116 City/County: Sheffield / Colbert Sampling Date: 12/12/18
 Applicant/Owner: Engineering Design Technologies, Inc. (EDT) State: AL Sampling Point: U-4
 Investigator(s): MJM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): hillslope Local Relief (concave, convex, none): concave Slope (%): <8
 Subregion (LRR or MLRA): LRRN Lat: 34.750162 Long: -87.721331 Datum: WGS84
 Soil Map Unit Name: FaD; Fullerton gravelly silt loam NWI Classification: none
 Are climatic / hydrologic conditions on this site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are normal circumstances present? Yes X No _____
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (if needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soils present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: U-4 data point location is within a draw.	

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (C6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (Includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Wetland hydrology is not present at U-4 data point location. Wetland indicators are not present at U-4 data point location.	

VEGETATION (Four Strata) - Use scientific names of plants.

 Sampling point: U-4

Tree Stratum (30' diameter plot)	Indicator Status	Absolute % Cover	Dominant Species	
1. <i>Celtis occidentalis</i>	FACU	50	Y	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC (A) <u>6</u> Total Number of Dominant Species Across All Strata (B) <u>9</u> Percent of Dominant Species That Are OBL, FACW, or FAC (A) <u>66.7</u> %
2. <i>Acer negundo</i>	FAC	25	Y	
3. <i>Liquidambar styraciflua</i>	FAC	10	N	
4.				
5.				
6.				
7.				
		85 = Total Cover		
50% of total cover: <u>42.5</u>		20% of total cover: <u>17</u>		
Sapling/Shrub Stratum (15' diameter plot)				Prevalence Index Worksheet Total % Cover of: Multiply by: OBL Species <u>0</u> x 1 = <u>0</u> FACW Species <u>0</u> x 2 = <u>0</u> FAC Species <u>6</u> x 3 = <u>18</u> FACU Species <u>3</u> x 4 = <u>12</u> UPL Species <u>0</u> x 5 = <u>0</u> Column Totals: <u>9</u> A <u>30</u> B Prevalence Index = B / A = <u>3.3</u>
1. <i>Ligustrum sinense</i>	FACU	90	Y	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
		90 = Total Cover		
50% of total cover: <u>45</u>		20% of total cover: <u>18</u>		
Herb Stratum (5' diameter plot)				Hydrophytic Vegetation Indicators: 1. Rapid Test for Hydrophytic Veg. <u> </u> X 2. Dominance Test is >50% 3. Prevalence Index is ≤ 3.0 * 4. Morphological adaptations * (Provide supporting data) Problematic Hydrophytic Veg. (Explain) * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <i>Ligustrum sinense</i>	FACU	50	Y	
2. <i>Toxicodendron radicans</i>	FAC	20	Y	
3. <i>Campsis radicans</i>	FAC	20	Y	
4. <i>Arundinaria tecta</i>	FACW	5	N	
5.				
6.				
7.				
8.				
9.				
10.				
11.				
		95 = Total Cover		
50% of total cover: <u>47.5</u>		20% of total cover: <u>19</u>		
Woody Vine Stratum (30' diameter plot)				Definitions of Four Vegetation Strata: Tree - ≥ 3in. (7.6 cm) DBH Sapling/Shrub - < 3in. DBH and > 3.28 ft. (1 m) tall Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants < 3.28 ft. tall Woody vine - All woody vines > 3.28 ft. in height
1. <i>Toxicodendron radicans</i>	FAC	50	Y	
2. <i>Smilax rotundifolia</i>	FAC	20	Y	
3. <i>Lonicera japonica</i>	FAC	20	Y	
4.				
5.				
6.				
		90 = Total Cover		
50% of total cover: <u>45</u>		20% of total cover: <u>18</u>		
Hydrophytic Vegetation Present? Yes <u> X </u> No <u> </u>				
Remarks: (Include photo numbers here or on a separate sheet.) A dominance of hydrophytic vegetation is present at U-4 data point location. Facultative vegetation dominance test is greater than 50%, at 66.7%. Facultative vegetation prevalence index is not less than 3.0, at 3.3.				

SOIL

Sampling point: U-4

Profile Description: (Describe to the depth needed to document the indicator or or confirm the absence of indicators.)

[illegible]

* Type: C=Concretion, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains ** Location: PL=Pore Lining, M=Matrix

Hydric Soils Indicators:

Indicators of Problematic Hydric Soils ***

<input type="checkbox"/> Histosols (A1)	<input type="checkbox"/> Dark Surfaces (S7)	<input type="checkbox"/> 2 cm muck (A10) (MLRA 147)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148)	<input type="checkbox"/> (MLRA 147, 148)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> (MLRA 136, 147)
<input type="checkbox"/> 2 cm Muck (A10) (LRR N)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sandy Mucky Minerals (S1) (LRR N, MLRA 147, 148)	<input type="checkbox"/> Iron-Manganese Masses (F-12) (LRR N, MLRA 136)	*** Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148)	
<input type="checkbox"/> Stripped Matrix (S6)		

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soils present ?

Yes _____
No X

Remarks:

Hydric soils are not present at U-4 data point location.

STREAM DATA SHEETS

NC DWQ Stream Identification Form Version 4.11

S-1

Date: 12/11/2018	Project/Site: JS18-123	Latitude: 34.74753
Evaluator: Mike McConnell	County: Colbert	Longitude: -87.72009
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 14.5)	Absent	Weak	Moderate	Strong
1 ^a Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	(2)	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	0	1	(2)	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	0	0.5	(1)	1.5
10. Natural valley	0	0.5	1	(1.5)
11. Second or greater order channel	No = (0)		Yes = 3	

^a artificial ditches are not rated; see discussions in manual

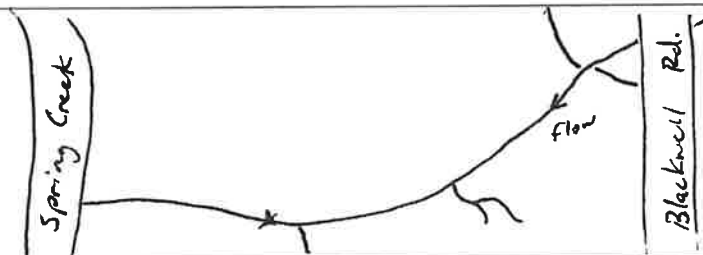
B. Hydrology (Subtotal = 3.5)	Absent	Weak	Moderate	Strong
12. Presence of Baseflow	0	(1)	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	0	0.5	(1)	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

C. Biology (Subtotal = 8)	Absent	Weak	Moderate	Strong
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	0	(1)	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	0	(0.5)	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	0	0.5	(1)	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = (1.5) Other = 0			

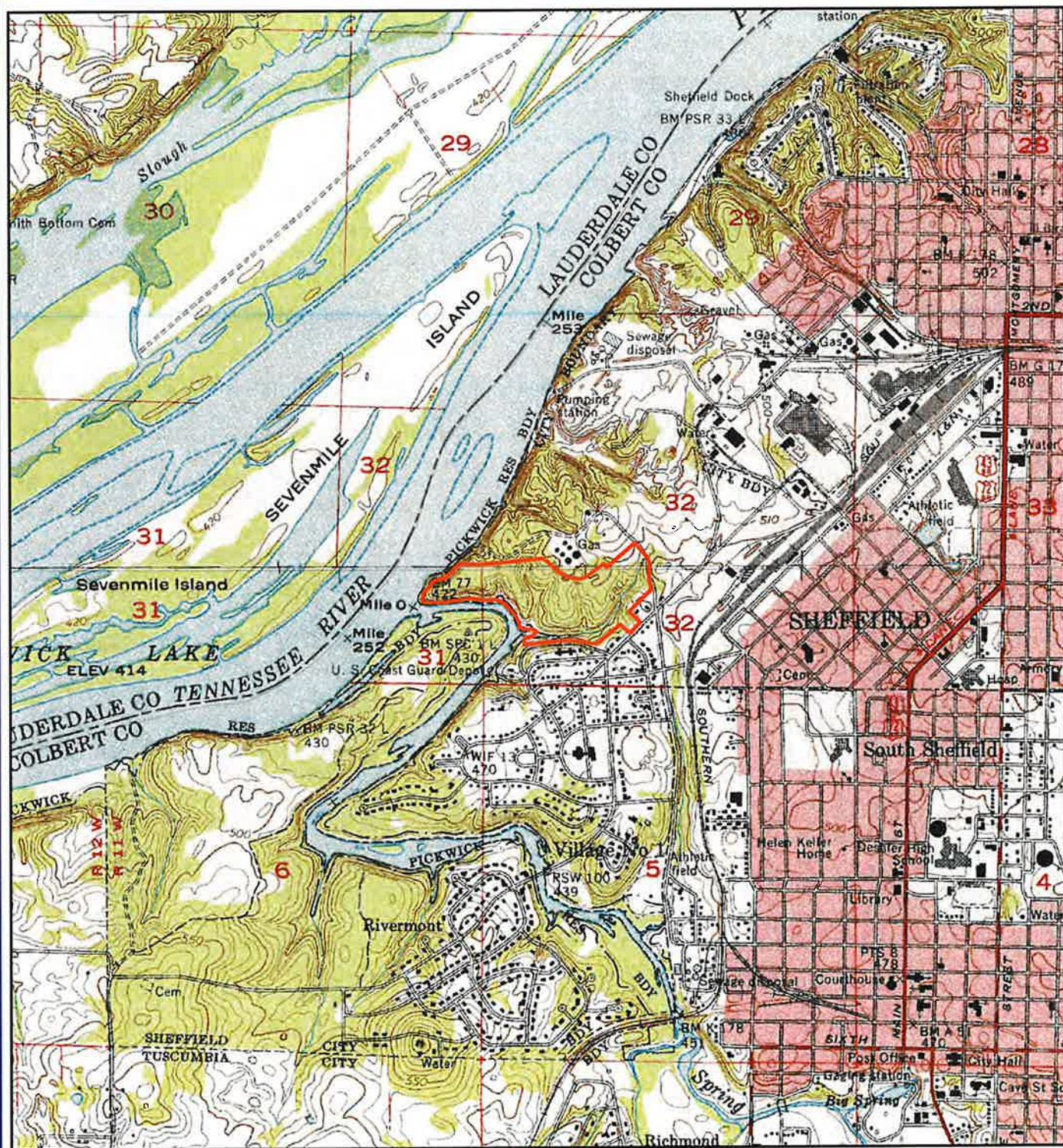
*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:



MAPS



0 0.5 1 Miles

SCALE = 1 : 24,000

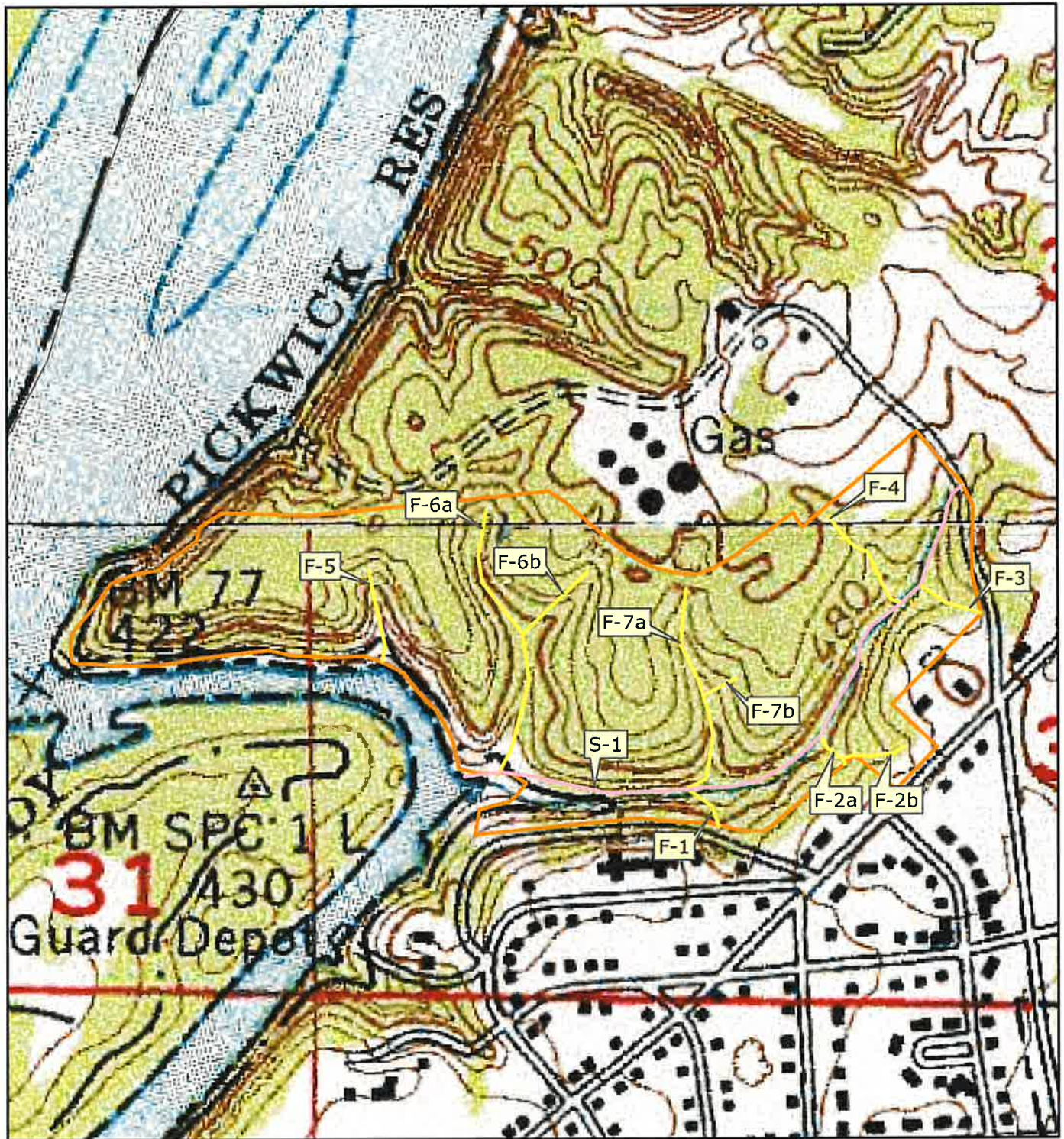
Site Boundary - 55 acres



SITE MAP
JS18-123
Sheffield, AL

AST Environmental

SOURCE: USDA - NRCS DRG and
2015 NAIPM: Colbert County, Alabama



0 500 1,000 Feet

SCALE = 1 : 6,000

- Z Intermittent Stream
- Z Ephemeral Drainage Feature



STREAM FEATURES MAP 1
JS18-123
Sheffield, AL

AST Environmental

SOURCE: USDA - NRCS DRG and
 2015 NAIPM: Colbert County, Alabama



SCALE = 1 : 6,000

- Z Intermittent Stream
- Z Ephemeral Drainage Feature



STREAM FEATURES MAP 2
JS18-123
Sheffield, AL




AST Environmental

SOURCE: USDA - NRCS DRG and
 2015 NAIPM: Colbert County, Alabama



0 500 1,000 Feet

SCALE = 1 : 6,000

-  Intermittent Stream
-  Ephemeral Drainage Feature
-  Data Point Location



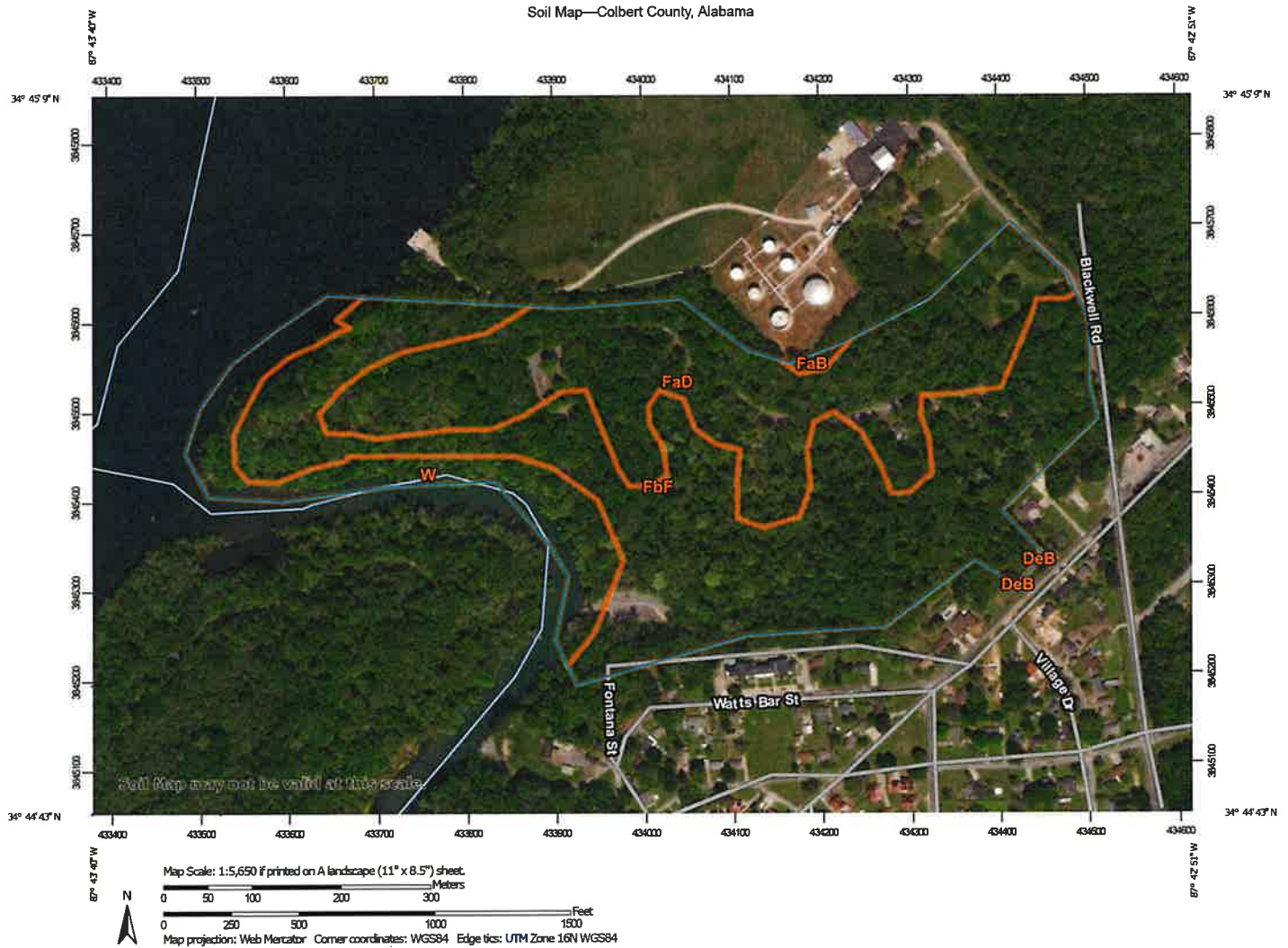
DATA POINT LOCATION MAP
JS18-123
Sheffield, AL

AST Environmental

SOURCE: USDA - NRCS DRG and
2015 NAIPM: Colbert County, Alabama

NRCS WEB SOIL SURVEY PACKET

Soil Map—Colbert County, Alabama



Soil Map—Colbert County, Alabama

MAP LEGEND

Area of Interest (AOI)		Spoil Area
Area of Interest (AOI)		Stony Spot
Soils		Very Stony Spot
Soil Map Unit Polygons		Wet Spot
Soil Map Unit Lines		Other
Soil Map Unit Points		Special Line Features
Special Point Features		Water Features
Blowout		Streams and Canals
Borrow Pit		Transportation
Clay Spot		Rails
Closed Depression		Interstate Highways
Gravel Pit		US Routes
Gravelly Spot		Major Roads
Landfill		Local Roads
Lava Flow		Background
Marsh or swamp		Aerial Photography
Mine or Quarry		
Miscellaneous Water		
Perennial Water		
Rock Outcrop		
Saline Spot		
Sandy Spot		
Severely Eroded Spot		
Sinkhole		
Slide or Slip		
Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Colbert County, Alabama
Survey Area Data: Version 11, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 14, 2015—Jun 26, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DeB	Decatur-Urban land complex, 2 to 8 percent slopes	0.0	0.0%
FaB	Fullerton gravelly silt loam, 2 to 6 percent slopes	0.2	0.3%
FaD	Fullerton gravelly silt loam, 6 to 15 percent slopes	25.4	36.0%
FbF	Fullerton-Bodine complex, 15 to 45 percent slopes	36.2	51.3%
W	Water	8.6	12.3%
Totals for Area of Interest		70.5	100.0%



Hydric Soil List - All Components

This table lists the map unit components and their hydric status in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
3. Soils that are frequently ponded for long or very long duration during the growing season.
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
4. Map unit components that are frequently flooded for long duration or very long duration during the growing season that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;

Hydric Condition: Food Security Act information regarding the ability to grow a commodity crop without removing woody vegetation or manipulating hydrology.

References:

- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. Doc. 2012-4733 Filed 2-28-12. February, 28, 2012. Hydric soils of the United States.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.
- Vasilas, L.M., G.W. Hurt, and C.V. Noble, editors. Version 7.0, 2010. Field indicators of hydric soils in the United States.

Report—Hydric Soil List - All Components

Hydric Soil List - All Components--AL033-Colbert County, Alabama					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
DeB: Decatur-Urban land complex, 2 to 8 percent slopes	Decatur	40-50	Interfluves	No	—
	Urban land	35-45	Interfluves	No	—
	Emory-Ponded	0-5	Interfluves	No	—
	Etowah	0-5	Interfluves	No	—
	Pruittton	0-5	Interfluves	No	—
	Sullivan	0-5	Interfluves	No	—
	Guthrie	0-5	Interfluves	Yes	2
	Fullerton	0-5	Interfluves	No	—
	Chenneby-Occasionally flooding	0-5	Interfluves	No	—
FaB: Fullerton gravelly silt loam, 2 to 6 percent slopes	Fullerton	80-90	Ridges	No	—
	Bodine	0-10	Ridges	No	—
	Bewleyville	0-5	Ridges	No	—
	Decatur	0-5	Ridges	No	—
FaD: Fullerton gravelly silt loam, 6 to 15 percent slopes	Fullerton	80-100	Ridges	No	—
	Bodine	3-10	Ridges	No	—
	Dickson	0-6	Ridges	No	—
	Lee	0-3	Flood plains	Yes	2
FbF: Fullerton-Bodine complex, 15 to 45 percent slopes	Fullerton	45	High hills	No	—
	Bodine	35	Mountain slopes	No	—
	Bewleyville	4	Ridges	No	—
	Decatur	4	Ridges	No	—
	Guthrie	4	Flood plains	Yes	2
	Barfield	4	High hills	No	—
W: Water	Water	100	—	No	—

Data Source Information

Soil Survey Area: Colbert County, Alabama
 Survey Area Data: Version 11, Sep 12, 2018



PHOTOGRAPHS

PHOTOGRAPH 1



Stream S-1. Facing downstream / west near its connection with Spring Creek.
Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 2



Stream S-1. Facing upslope / east near its connection with Spring Creek. Taken
by Mike McConnell, 12-11-18.

PHOTOGRAPH 3



Stream S-1. Facing upslope / east from a location near the central portion of the on-site stream reach. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 4



Stream S-1. Facing downslope / southwest near the eastern assessment area boundary. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 5



Feature F-1 and Fontana Street culvert. Facing upslope / south near its origin.
Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 6



Feature F-1 at its connection with Stream S-1. Facing upslope / southeast. Taken
by Mike McConnell, 12-11-18.

PHOTOGRAPH 7



Feature F-2a (right branch) at its connection with Stream S-1 (left branch).
Facing upslope / southeast. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 8



Feature F-2a (right branch) at its connection with Feature F-2b (left branch).
Facing upslope / east. Taken by Mike McConnell, 12-12-18.

PHOTOGRAPH 9



Feature F-2b (right branch) at its connection with Feature F-2a (left branch). Facing downslope / west. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 10



Feature F-2b. Facing upslope / east near its origin. Taken by Mike McConnell, 12-12-18.

PHOTOGRAPH 11



Feature F-3 (right branch) at its connection with Stream S-1 (left branch). Facing upslope / southeast. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 12



Feature F-3 and Blackwell Road culvert. Facing upslope / southeast. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 13



Feature F-4. Facing upslope / north near its origin. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 14



Feature F-4 near its connection with Stream S-1. Facing downslope / south. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 15



Feature F-5 near its connection with Spring Creek. Facing downslope / south.
Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 16



Feature F-5. Facing upslope / north near its origin. Taken by Mike McConnell,
12-11-18.

PHOTOGRAPH 17



Feature F-6a (joins with walking / ATV trail) at its connection with Stream S-1. Facing upslope / north. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 18



Feature F-6a and city park road culvert. Facing upslope / north near its origin. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 19



Feature F-6b. Facing upslope / northeast from near its connection with Feature F-6a. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 20



Feature F-6b and city park road culvert. Facing upslope / northeast near its origin. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 21



Feature F-7a and city park road culvert. Facing downslope / south near its origin.
Taken by Mike McConnell, 12-12-18.

PHOTOGRAPH 22



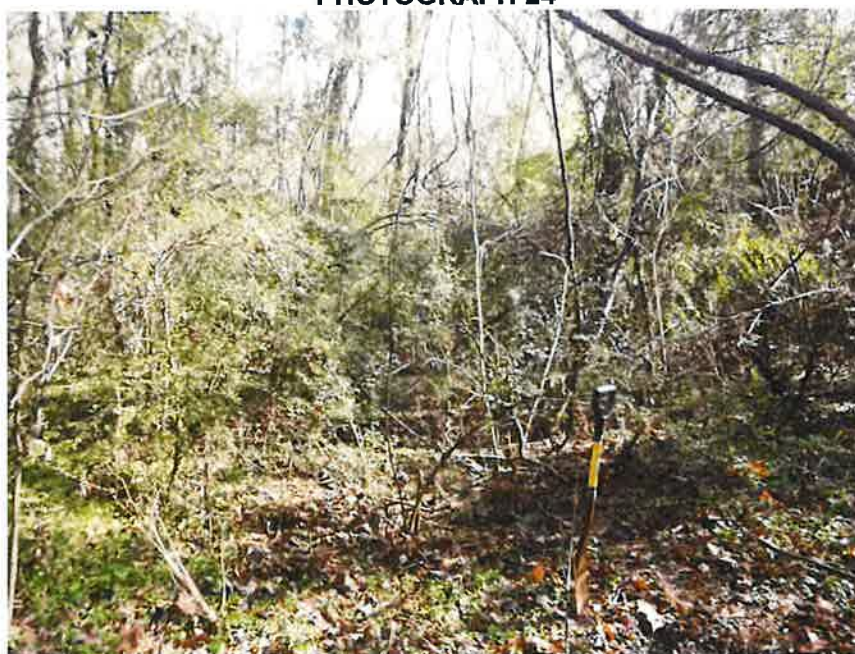
Feature F-7a (right branch) at its connection with Feature S-1 (left branch).
Facing downslope / southwest. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 23



Feature F-7b. Facing downslope / southwest near its origin. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 24



Upland U-1 data point location. Facing east. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 25



Upland U-2 data point location. Facing north. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 26



Upland U-3 data point location. Facing north. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 27



Upland U-4 data point location. Facing south. Taken by Mike McConnell, 12-12-18.

Protected Species Habitat Assessment

Tuscumbia Landing Project (55 Acres)

Sheffield, Colbert County, Alabama

This assessment was conducted
in general accordance with
the provisions of the
Endangered Species Act of 1973

December 17, 2018

JS18-123

PROJECT INFORMATION

AST Environmental (AST) has completed a Protected Species Habitat Assessment for the referenced project. The project boundary was provided to AST in an email received on October 24, 2018. The site is located in Sheffield, Alabama. The assessment area includes 55 acres and is situated east of the Tennessee River / Spring Creek confluence and west of Blackwell Road. See Site Map.

HABITAT ASSESSMENT

AST performed a protected species habitat assessment, in order to determine if suitable habitat is present or absent on site, for listed Colbert County species.

AST obtained information from the USFWS database and other published documents, and performed a field assessment. The following species are listed as Endangered or Threatened by the USFWS for Colbert County:

Common Name	Scientific Name	Status
Spectaclecase (mussel)	<i>Cumberlandia monodonta</i>	Endangered
Fanshell	<i>Cyprogenia stegaria</i>	Endangered
Dromedary pearlymussel	<i>Dromus dromas</i>	Endangered
Cumberlandian combshell	<i>Epioblasma brevidens</i>	Endangered
Oyster mussel	<i>Epioblasma capsaeformis</i>	Endangered
Snuffbox mussel	<i>Epioblasma triquetra</i>	Endangered
Pink mucket (pearlymussel)	<i>Lampsilis abrupta</i>	Endangered
Ring pink (mussel)	<i>Obovaria retusa</i>	Endangered
White wartyback (pearlymussel)	<i>Plethobasus cicatricosus</i>	Endangered
Orangefoot pimpleback (pearlymussel)	<i>Plethobasus cooperianus</i>	Endangered
Sheepnose mussel	<i>Plethobasus cyphus</i>	Endangered
Rough pigtoe	<i>Pleurobema plenum</i>	Endangered
Slabside pearlymussel	<i>Pleuronaia dolabelloides</i>	Endangered
Rabbitsfoot	<i>Quadrula cylindrica</i>	Threatened
Cumberland monkeyface (pearlymussel)	<i>Quadrula intermedia</i>	Endangered
Snail darter	<i>Percina tanasi</i>	Threatened
Alabama cavefish	<i>Speoplatyrhinus poulsoni</i>	Endangered
Spotfin chub	<i>Erimonax monachus</i>	Threatened
Leafy prairie-clover	<i>Dalea foliosa</i>	Endangered
Lyrate bladderpod	<i>Lesquerella lyrata</i>	Threatened
White fringeless orchid	<i>Platanthera integrilabia</i>	Threatened
Tennessee yellow-eyed grass	<i>Xyris tennesseensis</i>	Endangered
Gray bat	<i>Myotis grisescens</i>	Endangered
Northern long-eared Bat	<i>Myotis septentrionalis</i>	Threatened
Indiana bat	<i>Myotis sodalis</i>	Endangered

FIELD ASSESSMENT

Following the literature review, AST performed a field reconnaissance of the project area on December 11 and 12, 2018. Habitats occurring within the study limits were compared with the habitat preferences and requirements of those species Federally Listed for Colbert County in order to determine if suitable habitat for protected species is present or absent on site.

Additionally, site data was collected using methods prescribed in the *April, 2015, Range-Wide Indiana Bat Summer Survey Guidelines* manual in order to complete a series of

Indiana Bat Habitat Assessment Worksheets (IBHAW). The worksheets were used in order to assess the site for potential Indiana Bat and Northern Long-eared Bat summer roosting habitat.

The assessment area includes a 55-acre tract that was once a city park. The site is bordered to the northeast by the Tennessee River and Spring Creek. The majority of the site consists of rolling to steep uplands under a dense to open mixed hardwood canopy. Dominant tree species include: various oak and hickory species, sweetgum, hackberry, magnolia, walnut and Chinese privet. The majority of the site has a dense canopy with dense to open midstory and understory. Portions of the site are dense and choked with Chinese privet (*Ligustrum sinenset*). A small, terraced field is situated in the northeastern portion of the assessment area. Dominant herbaceous vegetation within the field includes: broomsedge, fescue, yellow bristle-grass, bermuda grass and young pine trees. A paved, park road is located throughout the assessment area. Several dilapidated pavilions are situated along the park road, within the site boundary.

One intermittent stream is located on site and totals 2,390 linear feet. This stream is an unnamed tributary to Spring Creek; it drains the southeast before emptying into Spring Creek. This stream is mapped by the United States Geological Survey (USGS) as a blue-line stream. Throughout its reach, the stream becomes subsurface and dry in many locations. Portions of the stream had surface water with little flow. Additionally, portions of the stream had standing water with no flow. Where wet, the stream was generally very shallow (a few inches or less). The majority of the stream has a deeply incised bed with steep, eroding banks. The lower reach of the stream was ponded with backwater from Spring Creek. Spring Creek was at top-of-bank during the assessment due to the amount of rainfall within the week prior to the assessment. See Stream Features Maps, and Site Photographs.

Ephemeral drainage features are common on site. Linear footages, location coordinates, and stream characteristics of each ephemeral drainage feature are presented in Table 1. See Table 1, Stream Features Maps and Site Photographs.

A review of the project vicinity indicates that there are 903 forested acres within a one mile radius of the project area. See Potential Bat Roosting Habitat Map.

SPECIES ASSESSMENT

Federally Listed species for Colbert County were grouped according to primary habitat constraints:

Stream-River Species

- Spectaclecase (mussel)
- Fanshell
- Dromedary pearlymussel
- Cumberlandian combshell
- Oyster mussel
- Snuffbox mussel
- Pink mucket (pearlymussel)
- Ring pink (mussel)
- White wartyback (pearlymussel)
- Orangefoot pimpleback (pearlymussel)
- Sheepnose mussel
- Rough pigtoe
- Slabside pearlymussel

Rabbitsfoot
Cumberland monkeyface (pearlymussel)
Snail darter
Spotfin chub

Cave Species

Gray bat
Indiana bat
Northern long-eared bat
Alabama cave Fish

Bog Wetland Species

White fringeless orchid
Tennessee yellow-eyed grass

Limestone Barren Species

Lyrate bladderpod
Leafy prairie-clover

Habitat requirements were evaluated in order to determine if suitable habitat for protected species was present or absent within the site boundary. AST's finding for each species are discussed below.

Stream-River Species

Mussels

The **Spectaclecase Mussel** (*Cumberlandia mondonga*) is a small mussel reaching a maximum length of three inches. It occurs in large rivers typically on outside bends below bluff lines. It occurs in substrates from firm mud and sand to gravel, cobble, and boulders. It is known to inhabit submerged tree stumps and root masses and is also found under slab boulders or bedrock shelves. This species appears to require refugia from swift currents but is most often found near the interface with swift currents. Spectaclecase populations tend to be aggregated, and individuals seldom move except to burrow.

The **Fanshell** (*Cyprogenia stegaria*) is a small mussel reaching a maximum length of three inches. It occurs in medium to large streams typically with gravel substrates. It is found in deep and shallow water with strong currents. Glochidial hosts have been known to include: banded sculpin, mottled sculpin, greenside darter, Tennessee snub-nose darter and banded darter. The Nature Serve database lists the habitat for this species as: BIG RIVER, MEDIUM RIVER.

The **Dromedary Pearlymussel** (*Dromus dromas*) is a medium-sized freshwater mussel reaching a maximum length of 3.3 inches. *D. dromas* has been reported to live up to 25 years. They inhabit riffle areas in moderate current with sand and gravel substrates. They have also been found in deeper, slower moving water. The Nature Serve database lists the habitat for this species as: BIG RIVER, MEDIUM RIVER, Riffle.

The **Cumberlandian Combshell** (*Epioblasma brevidens*) is a small, solid-shelled mussel (approximately 3 inches maximum length). The only known extant population of *Epioblasma brevidens* in Alabama is located in Bear Creek (Colbert County). *Brevidens*, as well as other *Epioblasma* species are considered to be true riffle species, inhabiting pristine rocky streams. It has been collected from substrates ranging from coarse sand to gravel-filled cracks in boulders and bedrock. This species is not typically associated with small streams. The Nature Serve database lists the habitat for this species as: BIG RIVER, MEDIUM RIVER, MODERATE GRADIENT, Riffle.

The **Oyster Mussel** (*Epioblasma capsaeformis*) is a medium-sized mussel attaining an average size of 2.75 inches. It inhabits riffles with swift current, high water quality, and rocky substrates. *E. capsaeformis* was once common throughout its natural range. Critical habitat was designated for Bear Creek in Alabama and Mississippi. Nature Serve database lists the habitat for this species as: BIG RIVER, CREEK< MEDIUM RIVER, Moderate gradient, Riffle.

The **Snuffbox Mussel** (*Epioblasma triquetra*) has a relatively thick triangular-shaped, shell. This species was historically widespread in the upper Mississippi and Ohio River drainages. It was widespread but never considered to be abundant in the Tennessee River system. Extant populations are currently present in parts of Wisconsin, Illinois, Indiana, Kentucky, Michigan, Ohio, Pennsylvania, Tennessee, and West Virginia. This species typically inhabits riffles of medium and large rivers with rocky to sandy substrates. This species is known to burrow deeply, if inhabiting reaches with swift currents. The Nature Serve database lists the habitat for this species as: BIG RIVER, MEDIUM RIVER, Riffle.

The **Pink Mucket Mussel** (*Lampsilis abrupta*) is a medium sized freshwater mussel that will reach approximately 100 mm in length. The life span of the Pink Mucket may exceed 50 years. The Pink Mucket inhabits medium to large rivers with strong currents and impoundments with more lacustrine conditions. Sand, gravel, and pockets between rocky ledges are preferred substrates in areas with high velocity flows. Mud and sand is the more prevalent substrate type in areas with slower moving waters. The *Nature Serve database* lists the habitat for this species as: BIG RIVER, MEDIUM RIVER, and RIFFLE. The Pink Mucket Pearly Mussel is considered to be a big river species. Its distribution in Alabama is primarily limited to the Tennessee River Proper.

The **Ring Pink** (*Obovaria retussa*) is a medium to large sized freshwater mussel with a round shell. It has a solid shell that darkens with age. This species inhabits large rivers, but has been reported in medium sized rivers including the Duck River in Tennessee. Most historic occurrences of this species have been inundated due to dam impoundments. Nature Serve database lists the habitat for this species as: BIG RIVER, MEDIUM RIVER, Riffle.

The **White Wartyback** (*Plethobasus cicatricosus*) is a freshwater mussel with an elongated, thick shell. Its life history is not known but it is presumed to inhabit shoals and riffles in the Tennessee River and other large rivers. Nature Serve database lists the habitat as BIG RIVER, Riffle.

The **Orangefoot Pimpleback** (*Plethobasus cooperianus*) is a medium-sized mussel with maximum shell lengths reaching approximately 90mm. The shell is solid, heavy and moderately inflated. The orangefoot pimpleback is considered a big river species, found in sand, gravel, and cobble substrates in riffles and shoals of deep waters with steady currents. The Nature Serve database lists the habitat for this species as: BIG RIVER, Riffle.

The **Sheepnose Mussel** (*Plethobasus cyphyus*) has an oval or oblong shell with a smooth surface except for a single row tubercles running from the umbo to the ventral margin. The sheepnose is generally considered to be a large-river species but may occur in medium-sized rivers. It occurs in riffles or runs with swift currents and inhabits firm mud / sand to gravel / cobble substrates. This species is typically reported from deep water runs (>2 m) with slight to swift currents and in reservoirs, immediately below

dams. The Nature Serve database lists the habitat for this species as: BIG RIVER, Low gradient, MEDIUM RIVER, Moderate gradient, Riffle.

The **Rough Pigtoe Mussel** (*Pleurobema plenum*) is a medium sized freshwater mussel reaching 100 mm in length. The Rough Pigtoe historically occurred throughout the Ohio, Cumberland, and Tennessee River drainages. This species has been known to inhabit sand, gravel and cobble shoals of medium to large rivers. The Rough Pigtoe has also been collected from mud and sand flats. Extant populations of this species currently inhabit tailwaters below three impoundments on the mainstem of the Tennessee River (Pickwick, Wilson, and Guntersville). The *Nature Serve database* lists the habitat for this species as: BIG RIVER, MEDIUM RIVER. Its distribution in Alabama is primarily limited to the Tennessee River Proper.

The **Slabside Pearly Mussel** (*Pleuronaia dolabelloides*) is a moderately-sized freshwater mussel that can reach about 90 mm in length. It is primarily a large creek to medium-sized river species. It inhabits sand, fine gravel, and cobble substrates in relatively shallow riffles and shoals with moderate current. This species requires flowing, well-oxygenated waters to thrive.

The **Rabbitsfoot Mussel** (*Quadrula cylindrica cylindrica*) has a conspicuously rectangular shaped shell with pustules and chevron markings. Historically, the rabbitsfoot has been reported from 15 states ranging throughout the Ohio, Cumberland, Tennessee, lower Mississippi, White, Arkansas and Red River systems. Typical habitat for this species is small to medium rivers with moderate to swift currents. In smaller streams it inhabits gravel and cobble laden reaches near swift currents. The Nature Serve database lists the habitat for this species as: BIG RIVER, CREEK, MEDIUM RIVER, Moderate gradient, Riffle.

The **Cumberland monkeyface** (*Quadrula intermedia*) is a medium sized freshwater mussel with a greenish-yellowish shell. Host fish include the streamline chub and the blotched chub. Nature Serve database lists the habitat as: BIG RIVER, High gradient, MEDIUM RIVER, Moderate gradient, Riffle. This species is known to inhabit shallow riffle areas of headwater streams and larger rivers among sand and gravel substrates. An experimental population is known to exist below Wilson Dam to the backwaters of Pickwick Reservoir in the Tennessee River in Alabama.

Mussel Results

Perennial stream habitat is not present on site; although the Tennessee River and Spring Creek border the site to the northeast. Potentially suitable habitat for listed mussels is not present within the site boundary (see Site Maps and Photographs).

Fish

The **Snail Darter** (*Percina tanasi*) is a fish reaching lengths that rarely exceed 85 mm and has a lifespan of one to three years. While feeding primarily on aquatic gastropods, the Snail Darter will also feed on clams and insects. The Snail Darter primarily inhabits two types of habitat, relatively shallow gravel shoal areas with swift current and deep slackwater pools in large streams and rivers. Spawning occurs in early February through April. Spawning occurs over the shallowest part of gravel shoals that consist of smooth gravel and impacted sand.

The Snail Darter's historical range may have included the middle portion of the Tennessee River main stem from northeastern Alabama, and possibly lower reaches of

major tributaries. Currently, the Snail Darter is relatively abundant in the lower French Broad, Holston, and Little Rivers near Knoxville, Tennessee. It is also known to inhabit other Tennessee waters including: the Hiwassee River, Sewee Creek, South Chickamauga Creek and the Sequatchie River. The Snail Darter is known from the Paint Rock River in Madison County, Alabama, but not from the project vicinity.

The **Spotfin Chub** (*Erimonax monachus*) is a short-lived, small cyprinid reaching 9cm in length. This species was once considered to be widespread within the upper and middle Tennessee River systems. Known populations are currently limited to upper and eastern Tennessee, Virginia and North Carolina. This species typically inhabits clear, large creeks or medium-sized rivers of moderate gradient. It is generally found in or near moderate and swift currents over gravel to bedrock, but rarely over sand or silt. The Nature Serve database lists the habitat for this species as: CREEK, MEDIUM RIVER, Moderate gradient.

Fish Results

Perennial stream habitat is not present within the assessment area; however, the Tennessee River and Spring Creek border the site to the northeast. Potentially suitable habitat for listed fishes is not present on site (see Site Maps and Photographs).

Cave Species

Bats

The **Gray Bat** (*Myotis grisescens*) is found in northern Alabama. It is a year-round cave resident, normally inhabiting caves located within one mile of a major river or reservoir. Grey bats roost in warm caves, during summer, scattered along rivers to establish colonies. During winter, they relocate and hibernate deep within caves. Gray Bats forage over water bodies for mayflies and other flying insects.

No bluffs, caves or cave-like structures were observed on site. Potentially suitable hibernacula for Gray Bat is not present within the study limits. The Tennessee River and Spring Creek border the project area to the northeast. Potentially suitable forage habitat is not present on site, but is potentially present adjacent to the site, over the Tennessee River and Spring Creek. One unnamed intermittent tributary to Spring Creek is present on site, but is too small to provide suitable forage habitat for the Grey Bat.

The **Indiana Bat** (*Myotis sodalis*) is found in northern Alabama. It is closely associated with caves, although the Indiana Bat is suspected to dwell within floodplain and upland forests during the warmer months. Indiana Bats have been known to roost in trees smaller than 10 inches diameter at breast height (dbh). Indiana Bats usually breed in early October and yield a single young in June or July. Breeding typically takes place at night and occurs in large subterranean rooms near cave entrances. According to Harvey, et al., 85 percent of Indiana Bats hibernate in nine caves located in the eastern U.S.

No bluffs, caves or cave-like structures were observed within the project boundary. Due to the lack of caves within the study limits, hibernacula and potential breeding habitat for the Indiana Bat is not present on site.

The *April, 2015, Range-Wide Indiana Bat Summer Survey Guideline* Manual describes suitable summer habitat for Indiana Bats as a wide variety of forested/wooded habitats where bats roost, forage, and travel. Habitat includes some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural

fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches dbh that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. Preferred tree species include: Shagbark Hickory, Cottonwood, White Oak, Maple, American Elm, Shortleaf Pine and other Oak species.

AST performed a field reconnaissance of the project area. Site data was collected using methods prescribed in the *April, 2015, Range-Wide Indiana Bat Summer Survey Guidelines* manual in order to complete a series of Indiana Bat Habitat Assessment Worksheet (IBHAW). The worksheets were used to assess the site for potential Indiana Bat and Northern Long-eared Bat summer roosting habitat.

The majority of the 55 acre site consists of a mature, mixed hardwood forest with a full canopy and open to dense midstories and understories. Two Indiana Bat Habitat Assessment worksheets were completed on-site to document tree species, water resources, and habitat features within the project boundary (see Bat Habitat Assessment Location Map and Indiana Bat Habitat Assessment Forms B-1 and B-2). Preferred, live, suitable roosting tree species were present at each Bat Habitat Assessment Area and throughout the project area. Preferred dominant tree species observed during the assessment include: White Oak (*Quercus alba*), Post Oak (*Quercus stellata*), Water Oak (*Quercus nigra*) and Ash-leaf Maple (*Acer negundo*). A review of the project vicinity indicates that there are 903 forested acres within a one mile radius of the survey corridor (see Potential Bat Roosting Habitat Map).

Snag trees (standing dead trees with exfoliating bark, cracks, crevices, and/or hollows) were observed throughout the project area. Suitable summer roosting habitat and forage habitat is potentially present among preferred, live, trees and suitable snag trees throughout the project area (see Bat Habitat Assessment Map and Indiana Bat Habitat Assessment Worksheets B-1 and B-2).

Based upon the presence of preferred live trees and suitable roosting trees within the study limits, the Indiana Bat could potentially be present within the project area during the summer months (see Site Maps and Photographs).

The **Northern Long-eared Bat** (*Myotis septentrionalis*) is found in northern Alabama. It is closely associated with caves, but also dwells within upland forests and forested ridges during warmer months. Northern Long-eared Bats have been known to roost in trees with holes, crevices and sloughing bark and also in caves and mines. Northern Long-eared Bats usually breed in late summer or early fall and yield a single young in late spring to early summer (Mirarchi, R.E., 2004).

No bluffs, caves or cave-like structures were observed within the project boundary. Due to the lack of caves within the study limits, hibernacula and potential breeding habitat for the Northern Long-eared Bat is not present on site.

The *April, 2015, Range-Wide Indiana Bat Summer Survey Guideline* Manual describes suitable summer habitat for Northern Long-eared Bats as a wide variety of forested/wooded habitats where bats roost, forage, and travel. Habitat includes some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches dbh that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such

as fencerows, riparian forests, and other wooded corridors. Preferred tree species include: Shagbark Hickory, Cottonwood, White Oak, Maple, American Elm, Shortleaf Pine and other Oak species. A review of the project vicinity indicates that there are 903 forested acres within a 1 mile radius of the survey corridor (see Potential Bat Roosting Habitat Map).

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Snag trees (standing dead trees with exfoliating bark, cracks, crevices, and/or hollows) were observed throughout the project area. Suitable summer roosting habitat and forage habitat is potentially present among preferred, live, trees and suitable snag trees throughout the project area (see Bat Habitat Assessment Map and Indiana Bat Habitat Assessment Worksheets B-1 and B-2).

Based upon the presence of preferred live trees and suitable roosting trees within the study limits, the Northern Long-eared Bat could potentially be present within the project area during the summer months (see Site Maps and Photographs).

Fish

The **Alabama Cave Fish** (*Speoplatyrhinus poulsoni*) is a small fish (6 cm) that is restricted to nearby Key Cave in Lauderdale County, Alabama. It is pinkish-white, has no eyes, and feeds on small aquatic invertebrates.

No bluffs, caves or cave-like structures were observed within the project area. Potentially suitable habitat for the Alabama Cave Fish is not present on site (see Site Maps and Photographs).

Bog Wetland Species

The **White Fringeless Orchid**, *Platanthera integrelabia*, is a perennial herb reaching 2 feet (60 cm) tall. The inflorescence is a terminal spike with up to 20 white, long spurred fragrant flowers. Typically, 6 to 15 white flowers grow in a round to elongate cluster at the top of a single stem, blooming from July to early September. The flower petals are oblong (7mm by 2.5 mm) with wavy but smooth edges. Fruit is ellipsoid (15 mm by 3 mm). *Platanthera integrelabia* is typically found in partially, but not fully, shaded bogs at

stream heads and seepage slopes associated with *Sphagnum* spp., *Osmunda cinnamomea*, *Woodwardia areolata*, and *Thelypteris novaboracensis*. This species is found in sandstones on the Appalachian Plateaus of Kentucky, Tennessee, and Alabama, the Coast Plain of Alabama and Mississippi, and the Ridge and Valley Province in Alabama.

Boggy areas and seepage slopes were not observed on site. Based upon lack of habitat, the White Fringeless Orchid is not expected to be present on site (see Site Maps and Photographs).

Tennessee Yellow-Eyed Grass, *Xyris tennesseensis*, is a perennial herb arising from a bulbous base, reaching 11 – 28 in. (28 – 71 cm) in height. The lower leaves are 1-4.5 dm long and mostly erect and linear. The inflorescence consists of a single cone-like spike (0.4 - 0.6 in.) with small, pale yellow flowers (0.2 in. in length). Blooms occur during August and September. This species can occur solitary or in small dense tufts. Flowers open in the morning and close by mid-afternoon. *Xyris tennesseensis* is a wetland obligate plant. It is only found in open or thin canopy woods among gravelly seep-slopes with year-round seepage or mineral rich water flow; and spring runs. This plant is known to occur only in Bibb, Calhoun, Franklin and Shelby counties in Alabama.

This species is not known from Colbert County. Limestone seep-slopes, springs, and spring runs were not observed on site. Based upon the lack of habitat, Tennessee Yellow-Eyed Grass is not expected to be present within the study limits (see Site Maps and Photographs).

Limestone Barren Species

Lyrate Bladderpod (*Lesquerella lyrata*) occurs only in Alabama in Colbert and Lawrence Counties. This species requires open, thin soils on or near cedar glades and limestone barren habitats.

Limestone glades, barrens, and cedar glades are not present on site. Based upon lack of habitat, Lyrate Bladderpod is not expected to be present on site (see Site Maps and Photographs).

Leafy prairie clover (*Dalea foliosa*) occurs in Tennessee and Alabama in open, thin-soiled limestone glades and limestone barrens. In Tennessee, the plants occur on wet calcareous barrens and moist prairies or cedar glades, usually near a stream or where some seepage from limestone provides seasonal moisture. Associates in these habitats are rose-pink (*Sabatia angularis*), and black-eyed Susan (*Rudbeckia triloba*). The species is disjunct in Illinois, where it is restricted to thin-soiled (< 4.5 dm), wet or moist, open dolomite prairies on river terraces in the northeastern part of the state. The plants require full sun and low competition for optimum growth and reproduction; periodic fire is needed to maintain these conditions.

Limestone glades, barrens, and cedar glades are not present on site. Based upon lack of habitat, Leafy prairie clover is not expected to be present on site (see Site Maps and Photographs).

CONCLUSIONS

Of the 25 protected species addressed in this habitat assessment:

- No individuals or populations were incidentally observed during the protected species habitat assessment.
- Suitable habitat for listed mussel, snail, and fish species is not present within the project boundary.
- Suitable habitat for listed herbaceous species is not present within the project boundary.
- Potentially suitable hibernacula for listed Bat species is not present within the project boundary.
- Potentially suitable Indiana Bat and Northern Long-eared Bat summer roosting habitat and forage habitat is likely present within the project boundary.

Written concurrence with the findings of this report should be obtained from the USFWS prior to implementation of the proposed project.

AST Environmental



Michael McConnell
Environmental Scientist



Jeff Selby, M.S.
Senior Biologist

Selected References:

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- NatureServe Online Encyclopedia of Life
<http://www.natureserve.org/explorer/>

TABLES

Table 1. Stream or drainage features located on the 55 acre site. Inspiration Landing project.
Sheffield, Colbert County, AL. December 11-12, 2018.

Drainage Feature	Linear Feet	Latitude	Longitude	USGS Blue-Line Mapped	Wet During Assessment
S-1	2,390	34.74753	-87.72009	Yes	Partially
F-1	170	34.74717	-87.71858	No	No
F-2a	130	34.74788	-87.71721	No	No
F-2b	230	34.74787	-87.71656	No	No
F-3	230	34.74933	-87.71579	No	Partially
F-4	410	34.75003	-87.71711	No	No
F-5	330	34.74953	-87.72271	No	No
F-6a	1,000	34.75006	-87.72136	No	No
F-6b	315	34.74944	-87.72043	No	No
F-7a	770	34.74895	-87.71902	No	No
F-7b	130	34.74857	-87.71848	No	No

**INDIANA BAT and NORTHERN LONG-EATED BAT
HABITAT ASSESSMENT DATA SHEETS**

INDIANA BAT HABITAT ASSESSMENT WORKSHEET

Project Name: JS18-123

Date: 12-12-2018

Township/Range/Section: _____

Latitude/Longitude: 34.74942 / -87.72517

Surveyor: MJM

Project Description

55 acre site - proposed Inspiration Landing development.

Site located east of the Spring Creek / Tennessee River confluence and west of Blackwell Road.
Sheffield, Colbert County, Alabama.

Project Area

55 acres	Total Acres	Forest Acres		Open Acres	
		% of site	% w/in 1 mile	% of site	% w/in 1 mile
	55 acres	Appx. 98% or 54 acres	Appx. 45% or 903 acres	Appx. 2% or 1 acre	Appx. 55% or 1,107 acres
Tree Removal (ac)	Completely cleared	Partially cleared (with leave trees)	Reserve acres- no clearing		
	unknown	unknown	unknown		

Landscape within 3 mile radius

Corridors to other Forested Areas?

There are 2,010 total acres within a 1 mile radius of the study limits.

There are 903 forested acres, 45% of the 2,010 acres within a 1 mile radius of the study limits.

There are 1,107 open acres, 55% of the 2,010 acres within a 1 mile radius of the study limits.

Describe Adjacent Property (e.g. forested, grassland, commercial or residential development, water sources)

The project area is situated adjacent to Pickwick Lake of the Tennessee River and Spring Creek.

The majority of the project area consists of a mature forest with a open to dense canopy, midstory and understory.

Approximately 1,107 open acres within a 1 mile radius includes commercial, residential development.

Other open areas include the Tennessee River, Spring Creek and maintained landscapes.

Proximity to Public Land

What is the distance (mi.) from the project area to public lands (i.e., national or state forests, national or state parks, conservation areas)?

Seven Mile Island Wildlife Management (4,685 acres) is situated approximately 2,100 feet northeast of the project area.

Key Cave National Wildlife Refuge (1,030 acres) is situated approximately 3.2 miles east of the project area.

Sample Site Description

Sample Site No. B-1

Tract(s) _____

Water Resources at Sample Site					
Stream Type and Length (Number and Length)	Ephemeral		Intermittent		Perennial
	No. 0	N/A	No. 0	N/A	No. 0 N/A
Pools/Ponds (Number and Size)	No. 0		Open and accessible to bats? (Y/N)		
			N/A		
Wetlands (Approx. acreage)	Permanent			Seasonal	
	No. 0	N/A	No. 0	N/A	
Describe existing condition of water resources:					
Ephemeral, Intermittent, and Perennial Streams are within or adjacent to the project area.					
Pools or Ponds were not observed within the project boundary.					
Wetlands were not observed within the project boundary.					
The main stem of the Tennessee River is situated adjacent to the project boundary.					
Spring Creek is situated adjacent to the project boundary.					

Forest Resources at Sample Site			
1=1-10% 2=11-20% 3=21-40% 4=41-60% 5=61-80% 6=81-100% (Closure and Density Ranges)			
Closure and Density	Canopy	Midstory	Understory
	70% = 5	10% = 1	20% = 2
Dominant Species of Mature Tree Species (In stand):			
hackberry (<i>Celtis occidentalis</i>), walnut (<i>Juglans nigra</i>), Chinese privet (<i>Ligustrum sinense</i>)			
northern red oak (<i>Quercus rubra</i>), white oak (<i>Quercus nigra</i>), bitternut hickory (<i>Carya cordiformis</i>)			
% Preferred Tree Species >9" in DBH	Quercus nigra 20% Quercus rubra 50%		
% Trees with ≥ 30% exfoliating bark	20%	10%	5%
Size Composition of Live Trees (%)	Small (4-8")	Medium (9-15")	Large (>15")
	30%	30%	40%
Number of Suitable Snags	No. 8	Standing dead trees with sloughing bark ≥30%, crevices, or holes. Snags without these characteristics are not considered suitable.	

IS THE HABITAT SUITABLE FOR INDIANA BATS?

IF SUITABLE: HIGH MODERATE LOW

Additional Stand Comments:	Preferred Tree Species
Suitable snag trees were observed at B-1 data point location.	Shagbark Hickory
Preferred tree species identified during the assessment include: white oak and northern red oak	Cottonwood
Live preferred tree species were present at B-1 data point location.	White Oak
Suitable roosting habitat is potentially likely.	Maple
	American Elm
	Shortleaf Pine
	Other Oak Species

INDIANA BAT HABITAT ASSESSMENT WORKSHEET

Project Name: JS18-123

Date: 12-12-2018

Township/Range/Section: _____

Latitude/Longitude: 34.74855 / -87.72004

Surveyor: MJM

Project Description

55 acre site - proposed Inspiration Landing development.

Site located east of the Spring Creek / Tennessee River confluence and west of Blackwell Road.

Sheffield, Colbert County, Alabama.

Project Area

55 acres	Total Acres	Forest Acres		Open Acres	
		% of site	% w/in 1 mile	% of site	% w/in 1 mile
	55 acres	Appx. 98% or 54 acres	Appx. 45% or 903 acres	Appx. 2% or 1 acre	Appx. 55% or 1,107 acres
Tree Removal (ac)	Completely cleared	Partially cleared (with leave trees)	Reserve acres- no clearing		
	unknown	unknown	unknown		

Landscape within 3 mile radius

Corridors to other Forested Areas?

There are 2,010 total acres within a 1 mile radius of the study limits.

There are 903 forested acres, 45% of the 2,010 acres within a 1 mile radius of the study limits.

There are 1,107 open acres, 55% of the 2,010 acres within a 1 mile radius of the study limits.

Describe Adjacent Property (e.g. forested, grassland, commercial or residential development, water sources)

The project area is situated adjacent to Pickwick Lake of the Tennessee River and Spring Creek.

The majority of the project area consists of a mature forest with a open to dense canopy, midstory and understory.

Approximately 1,107 open acres within a 1 mile radius includes commercial, residential development.

Other open areas include the Tennessee River, Spring Creek and maintained landscapes.

Proximity to Public Land

What is the distance (mi.) from the project area to public lands (i.e., national or state forests, national or state parks, conservation areas)?

Seven Mile Island Wildlife Management (4,685 acres) is situated approximately 2,100 feet northeast of the project area.

Key Cave National Wildlife Refuge (1,030 acres) is situated approximately 3.2 miles east of the project area.

Sample Site Description

Sample Site No. B-2

Tract(s) _____

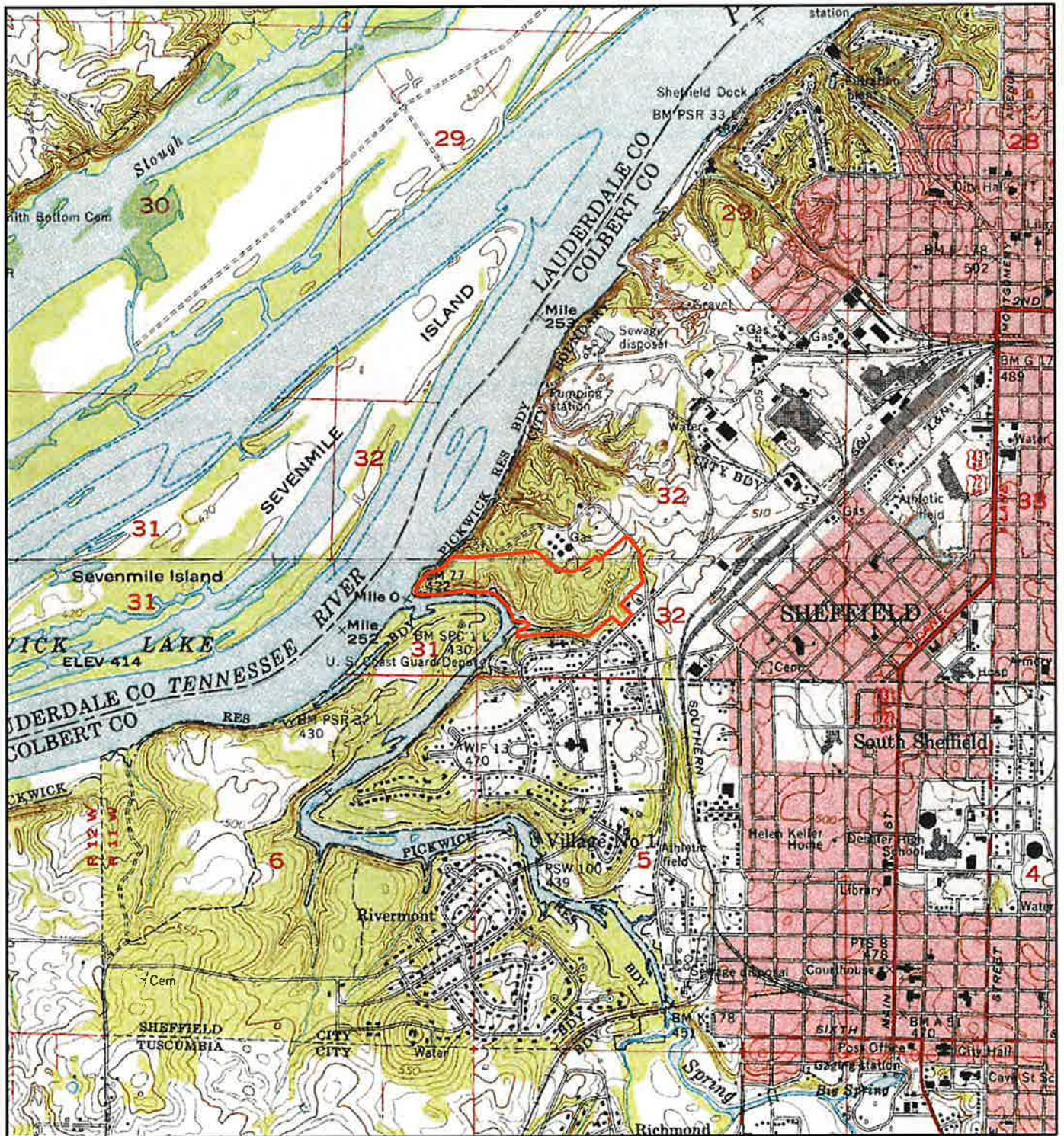
Water Resources at Sample Site						
Stream Type and Length (Number and Length)	Ephemeral		Intermittent		Perennial	
	No. 0	N/A	No. 0	N/A	No. 0	N/A
Pools/Ponds (Number and Size)	No. 0		Open and accessible to bats? (Y/N)			
			N/A			
Wetlands (Approx. acreage)	Permanent			Seasonal		
	No. 0	N/A		No. 0	N/A	
<p>Describe existing condition of water resources:</p> <p>Ephemeral, Intermittent, and Perennial Streams are within or adjacent to the project area.</p> <p>Pools or Ponds were not observed within the project boundary.</p> <p>Wetlands were not observed within the project boundary.</p> <p>The main stem of the Tennessee River is situated adjacent to the project boundary.</p> <p>Spring Creek is situated adjacent to the project boundary.</p>						

Forest Resources at Sample Site			
1=1-10% 2=11-20% 3=21-40% 4=41-60% 5=61-80% 6=81-100% (Closure and Density Ranges)			
Closure and Density	Canopy	Midstory	Understory
	65% = 5	10% = 1	25% = 2
<p>Dominant Species of Mature Tree Species (In stand):</p> <p>hackberry (<i>Celtis occidentalis</i>), shagbark hickory (<i>Carya ovata</i>), Chinese privet (<i>Ligustrum sinense</i>)</p> <p>northern red oak (<i>Quercus rubra</i>), white oak (<i>Quercus nigra</i>), bitternut hickory (<i>Carya cordiformis</i>)</p>			
% Preferred Tree Species >9" in DBH	Quercus nigra 20% Quercus rubra 50% Carya ovata 10%		
% Trees with ≥ 30% exfoliating bark	20%	10%	5%
Size Composition of Live Trees (%)	Small (4-8")	Medium (9-15")	Large (>15")
	30%	30%	40%
Number of Suitable Snags	No. 1	Standing dead trees with sloughing bark ≥30%, crevices, or holes. Snags without these characteristics are not considered suitable.	

IS THE HABITAT SUITABLE FOR INDIANA BATS?			
IF SUITABLE:	HIGH	MODERATE	LOW

Additional Stand Comments:	Preferred Tree Species
Suitable snag trees were observed at B-2 data point location.	Shagbark Hickory
Preferred tree species identified during the assessment include: white oak, northern red oak and	Cottonwood
Live preferred tree species were present at B-2 data point location.	White Oak
Suitable roosting habitat is potentially likely.	Maple
	American Elm
	Shortleaf Pine
	Other Oak Species

MAPS



0 0.5 1 Miles

SCALE = 1 : 24,000

Site Boundary - 55 acres



SITE MAP
JS18-123
Sheffield, AL

AST Environmental

SOURCE: USDA - NRCS DRG and
 2015 NAIPM: Colbert County, Alabama



0 500 1,000 Feet

SCALE = 1 : 6,000

- Z Intermittent Stream
- Z Ephemeral Drainage Feature



STREAM FEATURES MAP 1
JS18-123
Sheffield, AL

AST Environmental

SOURCE: USDA - NRCS DRG and
 2015 NAIPM: Colbert County, Alabama



0 500 1,000 Feet

SCALE = 1 : 6,000

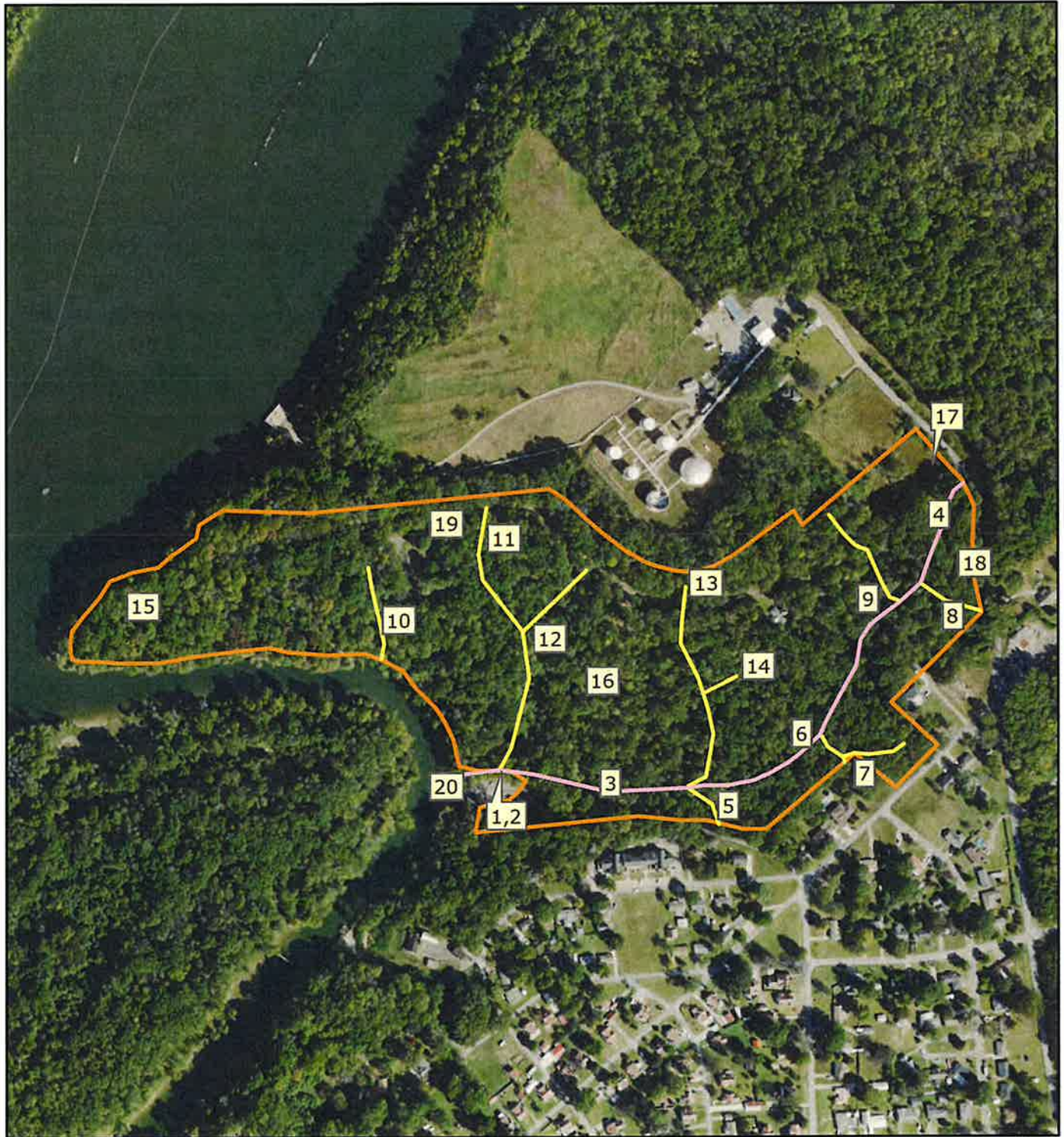
- Intermittent Stream
- Ephemeral Drainage Feature



STREAM FEATURES MAP 2
JS18-123
Sheffield, AL

AST Environmental

SOURCE: USDA - NRCS DRG and
 2015 NAIPM: Colbert County, Alabama



0 500 1,000 Feet

SCALE = 1 : 6,000

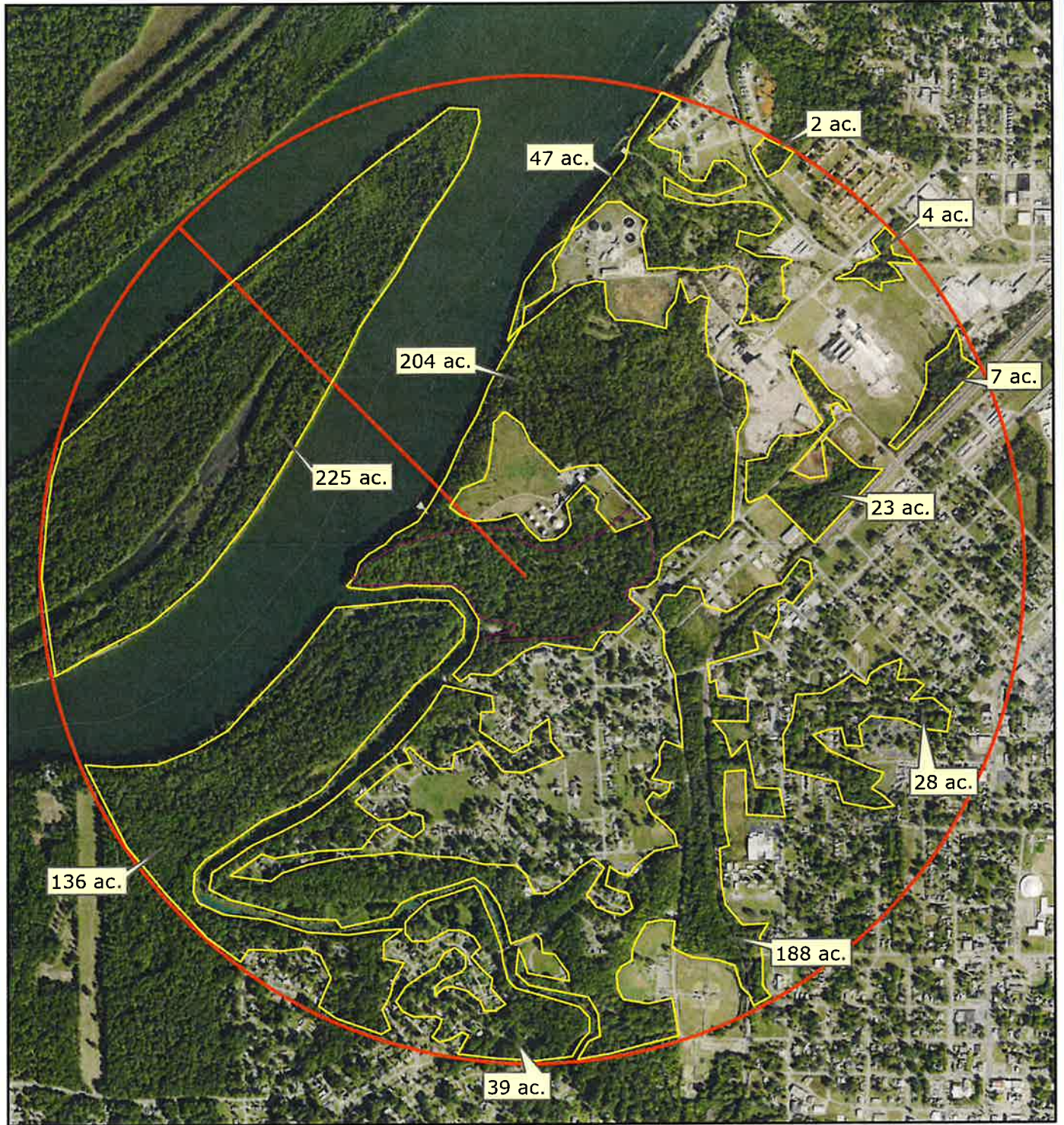
- Z Intermittent Stream
- Z Ephemeral Drainage Feature
- X Photograph Location



PHOTOGRAPH LOCATION MAP
JS18-123
Sheffield, AL

AST Environmental

SOURCE: USDA - NRCS DRG and
 2015 NAIPM: Colbert County, Alabama



0 0.5 1 Miles



SCALE = 1 : 18,000

- Site Boundary
- Potential Indiana Bat and Northern Long-eared Bat Roosting Habitat - 903 acres in a 1 mile radius
- 1 Mile Radius

**POTENTIAL BAT ROOSTING
HABITAT MAP JS18-123
Sheffield - Colbert County, AL**

AST Environmental

SOURCE: USDA - NRCS DRG and
2015 NAIPM; Colbert County, Alabama

PHOTOGRAPHS

PHOTOGRAPH 1



Unnamed intermittent tributary to Spring Creek. Facing downstream / west near the western assessment boundary. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 2



Unnamed intermittent tributary to Spring Creek. Facing upslope / east near the western assessment boundary. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 3



Unnamed intermittent tributary to Spring Creek. Facing upslope / east from a location near the central portion of the project boundary. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 4



Unnamed intermittent tributary to Spring Creek. Facing downslope / southwest near the western project boundary. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 5



Ephemeral drainage feature F-1 and Fontana Street culvert. Facing upslope / south near its origin. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 6



Ephemeral drainage feature F-2a (right branch) at its connection with the unnamed intermittent tributary to Spring Creek (left branch). Facing upslope / southeast. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 7



Ephemeral drainage feature F-2b (right branch) at its connection with Ephemeral drainage feature F-2a (left branch). Facing downslope / west. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 8



Ephemeral drainage feature F-3 and Blackwell Road culvert. Facing upslope / southeast. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 9



Ephemeral drainage feature F-4 near its connection with the unnamed intermittent tributary to Spring Creek. Facing downslope / south. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 10



Ephemeral drainage feature F-5 near its connection with Spring Creek. Facing downslope / south. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 11



Ephemeral drainage feature F-6a and city park road culvert. Facing upslope / north near its origin. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 12



Ephemeral drainage feature F-6b. Facing upslope / northeast from near its connection with Ephemeral drainage feature F-6a. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 13



Ephemeral drainage feature F-7a and city park road culvert. Facing downslope / south near its origin. Taken by Mike McConnell, 12-12-18.

PHOTOGRAPH 14



Ephemeral drainage feature F-7b. Facing downslope / southwest near its origin. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 15



Bat Habitat Data Point B-1 location. Facing east near the western portion of the assessment area. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 16



Bat Habitat Data Point B-2 location. Facing south near the central portion of the assessment area. Taken by Mike McConnell, 12-11-18.

PHOTOGRAPH 17



Open area situated in the northwestern portion of the assessment area. Facing west near the eastern project boundary. Taken by Mike McConnell, 12-12-18.

PHOTOGRAPH 18



Paved park road through a forested upland with a dense privet understory. Facing west near the eastern assessment area boundary. Taken by Mike McConnell, 12-12-18.

PHOTOGRAPH 19



Paved park road through a forested upland with a dense privet understory. Facing west near the northern central portion of the assessment area. Taken by Mike McConnell, 12-12-18.

PHOTOGRAPH 20



Spring Creek. Facing north from a location near the southwestern project boundary. Taken by Mike McConnell, 12-12-18.

PROPOSAL

AST Environmental

98 Mark Selby Pvt. Dr.
Decatur, AL 35603
Phone: (256) 476-7355

November 12, 2018
JS18-123

TO: City of Sheffield

ATTENTION: Steve Stanley

RE: Environmental Consulting Services for
Tuscumbia Landing Project (*approximately 55 acre site*)
Sheffield, Alabama / Colbert County

Mr. Stanley:

AST Environmental (AST) is pleased to present this proposal for environmental services for the referenced project. Our proposed scope of services, fees, schedule, and authorization process are discussed below.

SCOPE OF SERVICES

AST proposes to perform an environmental survey for an approximate 55-acre site located in the vicinity of the Tennessee River and Spring Creek in Sheffield, Alabama. The approximate project boundary was provided to AST in an email received on October 24, 2018. AST proposes to provide the necessary labor and materials for the following:

Wetlands Assessment / Delineation

AST's services will consist of a combination of published information review, field investigation, report of findings, and verification by the US Army Corps of Engineers (USACE). Published information review will include an assessment of available information such as U.S.G.S. topographic maps, U.S.D.A. Natural Resources soil survey reports, and other local information.

AST will then conduct a field assessment, using the "Routine On-Site Determination Method" as defined in the *1987 USACE Wetlands Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region*. This technique uses a multi-parameter approach for defining wetlands, which requires positive evidence of three criteria:

- A Prevalence of Hydrophytic Vegetation
- Hydric Soils
- Wetland Hydrology

If wetlands are found within the survey perimeter, AST will field delineate and mark wetland boundaries with plastic surveyor's tape and/or pin flagging. AST will also use a hand held global positioning system (GPS) unit to mark the locations of delineation flagging for use by surveying crews.

Upon completion of the delineation, AST will prepare and submit the necessary written documentation to request a site visit by representatives of the USACE to field verify the wetlands delineation, and jurisdictional boundaries, if applicable. AST will also coordinate and conduct a field verification site visit with the USACE.

Protected Species Habitat Assessment

The U.S. Department of the Interior, Fish and Wildlife Service (USFWS) lists the following species for Colbert County, Alabama:

Group	Common Name	Scientific Name	Status
Clams	Cumberland monkeyface (pearlymussel)	<i>Quadrula intermedia</i>	Endangered
	Pink mucket (pearlymussel)	<i>Lampsilis abrupta</i>	Endangered
	Dromedary pearlymussel	<i>Dromus dromas</i>	Endangered
	White wartyback (pearlymussel)	<i>Plethobasus cicatricosus</i>	Endangered
	Rough pigtoe	<i>Pleurobema plenum</i>	Endangered
	Orangefoot pimpleback (pearlymussel)	<i>Plethobasus cooperianus</i>	Endangered
	Ring pink (mussel)	<i>Obovaria retusa</i>	Endangered
	Spectaclecase (mussel)	<i>Cumberlandia monodonta</i>	Endangered
	Cumberlandian combshell	<i>Epioblasma brevidens</i>	Endangered
	Oyster mussel	<i>Epioblasma capsaeformis</i>	Endangered
	Slabside Pearlymussel	<i>Pleuroaia dolabelloides</i>	Endangered
	Fanshell	<i>Cyprogenia stegaria</i>	Endangered
	Snuffbox mussel	<i>Epioblasma triquetra</i>	Endangered
	Rabbitsfoot	<i>Quadrula cylindrica cylindrica</i>	Threatened
	Sheepnose Mussel	<i>Plethobasus cyphus</i>	Endangered
Fishes	Snail darter	<i>Percina tanasi</i>	Threatened
	Alabama cavefish	<i>Speoplatyrhinus poulsoni</i>	Endangered
	Spotfin Chub	<i>Erimonax monachus</i>	Threatened
Flowering Plants	Lyrate bladderpod	<i>Lesquerella lyrata</i>	Threatened
	Leafy prairie-clover	<i>Dalea foliosa</i>	Endangered
	White fringeless orchid	<i>Platanthera integrilabia</i>	Threatened
	Tennessee yellow-eyed grass	<i>Xyris tennesseensis</i>	Endangered
Mammals	Indiana bat	<i>Myotis sodalis</i>	Endangered
	Gray bat	<i>Myotis grisescens</i>	Endangered
	Northern Long-Eared Bat	<i>Myotis septentrionalis</i>	Threatened

Additionally the USFWS lists the following species as experimental populations for Colbert County, Alabama:

Group	Common Name	Scientific Name
Clams	Cumberland bean (pearlymussel)	<i>Villosa trabalis</i>
	Tubercled blossom (pearlymussel)	<i>Epioblasma torulosa torulosa</i>
	Turgid blossom (pearlymussel)	<i>Epioblasma turgidula</i>
	Yellow blossom (pearlymussel)	<i>Epioblasma florentina florentina</i>
	Alabama lampmussel	<i>Lampsilis virescens</i>
	Winged Mapleleaf	<i>Quadrula fragosa</i>
	Cumberland monkeyface (pearlymussel)	<i>Quadrula intermedia</i>
	Birdwing pearlymussel	<i>Lemiox rimosus</i>
	Dromedary pearlymussel	<i>Dromus dromas</i>
	Finerayed pigtoe	<i>Fusconaia cuneolus</i>
	Shiny pigtoe	<i>Fusconaia cor</i>
	Clubshell	<i>Pleurobema clava</i>
	Cumberlandian combshell	<i>Epioblasma brevidens</i>
	Oyster mussel	<i>Epioblasma capsaeformis</i>
	Cracking pearlymussel	<i>Hemistena lata</i>
Snails	Anthony's riversnail	<i>Athearnia anthonyi</i>

AST will perform a protected species habitat assessment in order to determine the presence or absence of suitable habitat for protected species listed for Colbert County within the survey boundary. AST's assessment will consist of obtaining information from the USFWS database and other published documents, as well as a field investigation. The habitat assessment will include a botanical survey of floral communities within the survey boundary. Floral communities will be photo-documented and dominant plant species will be identified and listed in the report of findings. If the habitat assessment occurs within a timeframe appropriate for identifying the two listed plant species known to occur in Colbert County, appropriate habitat types will be examined for the presence of said species. A report of findings will then be submitted to the USFWS for concurrence.

ESTIMATE OF FEES

AST proposes to complete the tasks outlined in the scope of services section of this document for a total fee of \$7,200. A general breakdown is provided below.

	<u>55-acre site</u>
• Wetlands / Jurisdictional Waters Survey	\$3,500
• Protected Species Habitat Assessment	<u>\$3,700</u>
	\$7,200 total

SCHEDULE

It is estimated that the proposed scope of services can be completed within 8 weeks of receiving authorization. If the protected species habitat assessment is completed during the bloom period for the listed flowering plants further botanical survey work will likely not be requested by the USFWS.

AUTHORIZATION:

In order to authorize this project, please complete the attached project authorization sheet and return by email to: **selby@astenv.net** or postal service to: 98 Mark Selby Pvt. Dr. Decatur, AL 35603.

AST sincerely appreciates the opportunity to provide you with these services.
Please feel free to call should you have further questions. I can be reached at (256) **476-7355**.

Sincerely,

AST Environmental

A handwritten signature in blue ink, appearing to read 'Jeff Selby', with a long horizontal flourish extending to the right.

Jeff Selby, M.S.
Member / Senior Biologist

PROJECT AUTHORIZATION

AST PROJECT #: JS18-123 55-acre site Protected Species Habitat Assessment and Wetland Assessment / Delineation

PROPOSED FEE: \$7,200

PROJECT AUTHORIZATION:

Contact Person (Name and Address):

Phone:

Fax:

Signature:

Date:

Invoicing Information (if different):

Notes:

Front Image

CITY OF SHEFFIELD
PO Box 380
Sheffield, AL 35660

0114

DATE 06/05/2019

PAY TO THE ORDER OF The University of Alabama Contract & Grant Acct. \$ 1,019.31

One thousand Nineteen Dollars & 31/100 DOLLARS

BANK INDEPENDENT
Grant Code: GR26876 Radically Original™

Member FDIC
bibank.com
256-386-5000

Inv# GR26876-3 Date: 05/03/19

Grant Fund

⑆06220579⑆ 00003⑆69642⑆0⑆1⑆1⑆4

Clayton Kelly

Karen Mathis

Back Image

Seq: 1
Dep: 000362
>555533336<
>1001<
Date: 06/13/19

07/11/2019 >062206295< Cadence Bank
Credit to the Account of the Within

Cadence Bank
FOR DEPOSIT ONLY
Deposited By: Darlene Burkhalter
UofA Contracts Grants #5073
The University of Alabama
The University of Alabama
1001
ACCOUNTING

Front Image

CITY OF SHEFFIELD
PO Box 380
Sheffield, AL 35660

DATE 07/08/2019

1047

PAY TO THE ORDER OF The University of Alabama Contract & Grant Acct. \$ 129.15

One hundred Twenty-nine Dollars & 15/100 DOLLARS

BANK INDEPENDENT
Radically Original™

Member FDIC
bibank.com
256-386-5000

Trv#GR26876-4 Date: 06/05/19

Redevelopment Fund

⑆06220579⑆ 0000316987⑆ 1047

Clayton Kelley
Steve Stanley

Back Image

Seq: 1
Dep: 000469
>555533336<
>1001<
Date: 07/15/19

Cadence Bank
For Deposit only to
The University of Alabama
1001 THE UNIVERSITY OF ALABAMA
UofA CONTRACTS & GRANTS ACCOUNTING
Deposited By:
Linda Bonner

07/16/2019 >062206295< Cadence Bank
Credit to the Account of the Within

Front Image

CITY OF SHEFFIELD
PO Box 380
Sheffield, AL 35660

DATE 04/16/2019

0107

PAY TO THE ORDER OF The University of Alabama Contract & Grant Acct. \$ 9,683.32

Nine-thousand Six-hundred Eighty-three & 32/100 DOLLARS

BANK INDEPENDENT
Tusculum Landing Radically Original™
03/01-03/31

Member FDIC
bibank.com
256-386-5000

~~Inv# CR26876-2~~ Date: 04/03/19

Grant Fund
⑆06220579⑆ 00003169642⑈ 0107

Chayton Kelly

Karen Mathis

Back Image

Seq: 1
Dep: 000209
>555533336<
>1001<
Date: 04/19/19

04/19/2019 >062206295< Cadence Bank
Credit to the Account of the Within

Cadence Bank
For Deposit only to
The University of Alabama
1001 THE UNIVERSITY OF ALABAMA
CONTRACT & GRANT ACCOUNTING
UofA Contracts Grants #5673
Deposited By:
Darlene Burkhalter

Front Image

CITY OF SHEFFIELD
PO Box 380
Sheffield, AL 35660

DATE 03/27/2019

1039

PAY TO THE ORDER OF Selby Environmental, Inc.

\$ 7,200.00

Seven-thousand Two-hundred Dollars & 0/100 DOLLARS

BANK INDEPENDENT

Radically Original™

Member FDIC
bibank.com
256-386-5000

Tusculum Landing
Project

Inv#1646 Date:12/19/18

Arthur R. Hendrix
Raymond Kelly

⑆062205791⑆ 0000316987⑆ 1039

Back Image

FOR DEPOSIT ONLY

**CITY OF SHEFFIELD
P.O. BOX 380
SHEFFIELD, AL. 35660**

INVOICE

TO:

MUSCLE SHOALS NATIONAL
HERITAGE AREA
UNA Box 5231
FLORENCE, AL 35632

DATE:

August 21, 2019

Description

Total Amt.

Partnership funds for Tuscumbia Landing
Environmental & Cultural Resources Survey

\$9,015.89

Total Amount Due: \$9,015.89



Clayton Kelly, City Clerk

Grant Code: GR26876
Bill Invoice: GR26876- 3
Payee Name: The University Of Alabama

Bill Date: 5/3/2019

Period From Date: 4/1/2019

Period To Date: 4/30/2019

Sponsor ID: Contract for Services

City of Sheffield/USDA-Archaeological Assessment of the Proposed
Tuscumbia Landing Trail System Colbert County, Alabama

Agency Name:

City Of Sheffield

600 N Montgomery Avenue

PO Box 380

Sheffield, AL 35660

Group	Previous Bill Amount	Current Bill Amount	Cumulative Bill Amount
Salaries & Wages	4,041.66	612.67	4,654.33
Fringe Benefits	1,611.31	192.52	1,803.83
Subtotal Salaries, Wages & Fringe Benefits	5,652.97	805.19	6,458.16
Travel	1,600.00	0.00	1,600.00
Communication Costs	0.00	3.80	3.80
Materials & Supplies	23.88	0.00	23.88
Repair , Maintenance & Rentals	408.32	0.00	408.32
Subtotal Operating Expense	2,032.20	3.80	2,036.00
F & A	1,998.15	210.32	2,208.47
Subtotal Facilities & Administration Costs	1,998.15	210.32	2,208.47
Grand Total	9,683.32	1,019.31	10,702.63

I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the Federal award. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812).

Please Remit To:

The University of Alabama
Contract & Grant Accounting
Box 870135
Tuscaloosa, AL 35487-0135

Tammy Hudson

Tammy Hudson, Director
Contract and Grant Accounting

Please return one copy of this invoice with your remittance.
Questions should be directed to: Sarah Rust, (205) 348-8121

Grant Code: GR26876
Bill Invoice: GR26876- 4
Payee Name: The University Of Alabama

Agency Name:

City Of Sheffield
600 N Montgomery Avenue
PO Box 380
Sheffield, AL 35660

Bill Date: 6/5/2019

Period From Date: 5/1/2019

Period To Date: 5/31/2019

Sponsor ID: Contract for Services

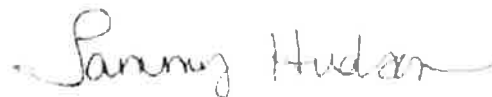
City of Sheffield/USDA-Archaeological Assessment of the Proposed
Tuscumbia Landing Trail System Colbert County, Alabama

Group	Previous Bill Amount	Current Bill Amount	Cumulative Bill Amount
Salaries & Wages	4,654.33	0.00	4,654.33
Fringe Benefits	1,803.83	0.00	1,803.83
Subtotal Salaries, Wages & Fringe Benefits	6,458.16	0.00	6,458.16
Professional Services	0.00	102.50	102.50
Travel	1,600.00	0.00	1,600.00
Communication Costs	3.80	0.00	3.80
Materials & Supplies	23.88	0.00	23.88
Repair , Maintenance & Rentals	408.32	0.00	408.32
Subtotal Operating Expense	2,036.00	102.50	2,138.50
F & A	2,208.47	26.65	2,235.12
Subtotal Facilities & Administration Costs	2,208.47	26.65	2,235.12
Grand Total	10,702.63	129.15	10,831.78

I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the Federal award. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812).

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The University of Alabama
Contract & Grant Accounting
Box 870135
Tuscaloosa, AL 35487-0135



Tammy Hudson, Director
Contract and Grant Accounting

Please return one copy of this invoice with your remittance.
Questions should be directed to: Sarah Rust, (205) 348-8121

Grant Code: GR26876
Bill Invoice: GR26876- 2
Payee Name: The University Of Alabama

Agency Name:

City Of Sheffield
600 N Montgomery Avenue
PO Box 380
Sheffield, AL 35660

Bill Date: 4/3/2019

Period From Date: 3/1/2019

Period To Date: 3/31/2019

Sponsor ID: Contract for Services

City of Sheffield/USDA-Archaeological Assessment of the Proposed
Tuscumbia Landing Trail System Colbert County, Alabama

Group	Previous Bill Amount	Current Bill Amount	Cumulative Bill Amount
Salaries & Wages	3,329.61	712.05	4,041.66
Fringe Benefits	1,321.76	289.55	1,611.31
Subtotal Salaries, Wages & Fringe Benefits	4,651.37	1,001.60	5,652.97
Travel	1,600.00	0.00	1,600.00
Materials & Supplies	23.88	0.00	23.88
Repair , Maintenance & Rentals	408.32	0.00	408.32
Subtotal Operating Expense	2,032.20	0.00	2,032.20
F & A	1,737.74	260.41	1,998.15
Subtotal Facilities & Administration Costs	1,737.74	260.41	1,998.15
Grand Total	8,421.31	1,262.01	9,683.32

I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the Federal award. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812).

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Box 870135
Tuscaloosa, AL 35487-0135



Tammy Hudson, Director
Contract and Grant Accounting

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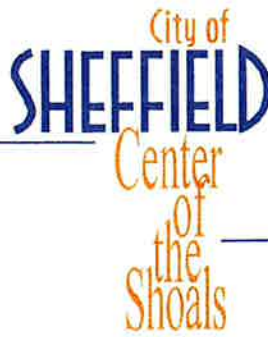
98 Mark Selby Pvt Dr
Decatur, AL 35603

Invoice #: 1646
Invoice Date: 12/19/2018
Due Date: 1/18/2019

Attn: Ian Sanford
City of Sheffield
600 N Montgomery Ave
Sheffield, AL 35660

[illegible]

Ian T. Sanford
Mayor



City Council Members
District 1, Ronnie Wicks
District 2, MaLea Scales
District 3, Steve Nix
District 4, Penny Freeman
District 5, Steve Stanley

August 21, 2019

Carolyn M. Barske Crawford, Ph.D.
Director, Muscle Shoals National Heritage Area
The University of North Alabama
472 N. Court Street
UNA Box 5231
Florence, AL 35632

Dear Dr. Crawford,

Thank you and the Muscle Shoals National Heritage for the generous grant provided to produce Environmental and Cultural Resources Surveys to facilitate implementation of the National Park Service plan for Tusculumbia Landing. The project was successfully completed and all expenses have been paid.

Environmental surveys were conducted by Selby Environmental for AST Environmental to identify Protected Species and Wetlands that might be impacted by the NPS plan. The Office for Archeological Research of the University of Alabama conducted a Cultural Resources Survey of the area of impact. The three reports of the surveys are attached.

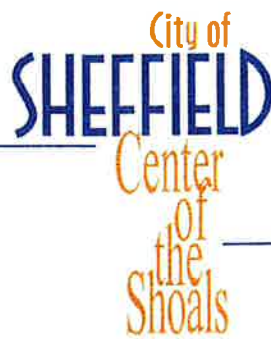
Copies of invoices and canceled checks are attached. The total expenses of the project were \$18,031.78. This is \$43.22 less than the \$18,075 authorized in the grant. The charges for the Protected Species and Wetlands Surveys matched the \$7,200 proposal by AST Environmental. OAR's invoices for actual work performed were less than their proposal. I have attached an invoice for half the actual expenses in the amount of \$9,015.89.

Please let me know if anything else is needed to receive the grant check and close out this very successful project. Thanks again for making it possible.

Yours truly,

Steve Stanley
Council Member, District 5
Chair, The Sheffield Redevelopment Authority
City of Sheffield

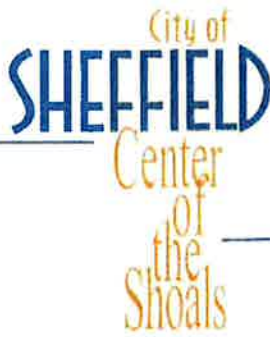
Ian T. Sanford
Mayor



City Council Members
District 1, Ronnie Wicks
District 2, MaLea Scales
District 3, Steve Nix
District 4, Penny Freeman
District 5, Steve Stanley

600 N. Montgomery Ave.
Sheffield, AL 35660
stevenrstanley@gmail.com
256-627-5089

Ian T. Sanford
Mayor



City Council Members
District 1, Ronnie Wicks
District 2, MaLea Scales
District 3, Steve Nix
District 4, Penny Freeman
District 5, Steve Stanley

August 21, 2019

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The University of North Alabama
472 N. Court Street
UNA Box 5231
Florence, AL 35632

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Please let me know if anything else is needed to receive the grant check and close out this very successful project. Thanks again for making it possible.

Yours truly,

A handwritten signature in blue ink that reads "Steve Stanley". The signature is fluid and cursive, with the first name "Steve" and last name "Stanley" clearly visible.

Steve Stanley
Council Member, District 5
Chair, The Sheffield Redevelopment Authority
City of Sheffield

Ian T. Sanford
Mayor



City Council Members
District 1, Ronnie Wicks
District 2, MaLea Scales
District 3, Steve Nix
District 4, Penny Freeman
District 5, Steve Stanley

600 N. Montgomery Ave.
Sheffield, AL 35660
stevenrstanley@gmail.com
256-627-5089

PARTNERSHIP AGREEMENT NO. PA2018-005
ADDENDUM NO. 02
BETWEEN
MUSCLE SHOALS NATIONAL HERITAGE AREA
AND
THE CITY OF SHEFFIELD, ALABAMA

PURPOSE: The purpose of this Addendum/Modification to General Partnership Agreement Number PA2018-005 is to:

1. ADD— OBJECTIVES:

- A. Principal Objectives: The principal objective of this agreement is to provide financial assistance in the amount of \$9037.50 to The City of Sheffield for the Tuscumbia Landing Project.
- B. Project Deliverables: Copy of the archeological assessment completed by the Office of Archeological Research and copy of the environmental survey completed by AST Environmental.

2. ADD-STATEMENT OF WORK:

- A. *MSNHA agrees to:*
 - i. Make available to the recipient funds in the amount not to exceed \$9037.50. The funds are available on a reimbursable basis with a required 50/50 match; and
 - ii. Provide technical training and strategic assistance through the resources available at the Muscle Shoals National Heritage Area (hereinafter known as “MSNHA”) (*Note:* Assistance is subject to the availability of personnel and may include training in such activities as interpretation, visitor services, advisement in curatorial procedures and architectural consultation); and
 - iii. Reimburse funds to the recipient in a timely manner. Such funds are contingent upon availability of funds.
 - iv. Provide technical assistance, if necessary, to the recipient with compliance issues related to the National Environmental Policy Act www.epa.gov/compliance/asics/nepa.html and Section 106 of the National Historic Preservation Act of 1966, as amended www.achp.gov/nhpa.html.
- B. *The Recipient agree to:*
 - i. Use award funds exclusively to facilitate the original approved project and budget as specified in the project proposal unless otherwise stated; and
 - ii. Submit a revised budget outlining work to be performed, cost of work and timeline of activities if partially funded; and
 - iii. Maintain sole responsibility in all matters related to the development, production, and implementation of project tasks. Assume all responsibility for public safety in accordance with applicable fire, safety, health and accessibility codes.
 - iv. **Acknowledge MSNHA and any other organizations they so designate in all media coverage and materials publicizing or resulting from approved project activities;** and
 - v. Provide an accounting of all project expenditures both funded and not funded by the award; and
 - vi. Submit a Final Report detailing project expenses and work accomplished with award funds. This report must include documentation of the matching funds. Documentation for this project must include: an invoice from contractor, copies of front and back of cancelled check from City of Sheffield to contractor, and documentation of any expenditures above and beyond \$18,075.00 (total project budget).
 - vii. Produce and submit deliverables as approved to MSNHA. and other entities so noted; and

- vii. INDEMNIFY AND HOLD HARMLESS MSNHA from any and all claims, actions, and judgments arising from and related to the implementation of the approved project subject to this agreement [instrument] to the extent allowed by law.
 - viii. Shall abide by all regulations as they may apply under U.S. Department of the Interior, National Park Service and/or comply with necessary Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying [submittal form DI-2010]. Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certification shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.
- C. **PRESERVATION PROJECTS ONLY** [BRICK AND MORTAR RELATED]
- i. Submit proof of general liability insurance in the amount of one million dollars [\$1M] per occurrence on project work if work being performed is preservation of a bricks and mortar structure.
 - ii. Allow MSNHA and the general public right of access to all public portions of the site for purposes of general visitation and public interpretation for a minimum of twelve [12] days annually for a period of one [1] year.
 - iii. Acknowledge support given by MSNHA through the display of a MSNHA sign during project work at the site. MSNHA will provide such a sign for this specific purpose.
 - iv. Meet standards as outlined in *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, included here by reference at www.cr.nps.gov/linklaws.htm.
 - v. Meet project standards as outlined in the *National Environmental Policy Act of 1969*, included by reference at <http://es.epa.gov/oeca/ofa/nepa.html>.
 - vi. Protect scenic and visual qualities of cultural landscapes located in MSNHA. Potential adverse scenic and visual impacts include any current project work or work performed at least five years after the completion of this project that is not compatible with the character of the surrounding natural environment and obstructs significant views as seen from public viewing places including those cultural landscapes throughout MSNHA.
- D. Both parties mutually agree to:
- a. Collaborate to the fullest extent possible on matters regarding the approved project subject to this agreement; and
 - b. Abide by the terms of Executive Order No. 11246 on nondiscrimination, and agree not to discriminate against any person based on race, color, religion, age, sex, or national origin. Both parties will take affirmative action to ensure participants are invited with regard to their race, color, religion, age, sex, or national origin. For more information go to www.dol.gov/esa/ofccp/reg/compliance/fs11246.htm.
3. **TERMS:** This addendum to the general partnership agreement will be for a period of one [1] year from the date executed; and
4. **AWARD CONDITIONS:** The recipient has full responsibility for the conduct of the project/program activities, for observance to the 'terms of agreement', and for informing MSNHA of any significant issues relating to the management and/or financial aspects of the award. All changes must be submitted in a formal written submission to MSNHA for prior approval on the *Prior Approval Request* form. This includes project time extension; a change in a project's scope of work; or a reallocation of project funds. All requests must include support documentation. Requests will be reviewed within 30 calendar days of receipt date. Should the request take longer than 30 days then the Recipient will be notified. All forms must be completed in its entirety in order for a request to be considered for approval by MSNHA.
5. **REIMBURSEMENTS:** All reimbursements will be processed according to MSNHA payment schedule.
6. **ACKNOWLEDGEMENT OF SUPPORT AND DISCLAIMER:** Unless otherwise notified, all materials publicizing or resulting from award activities must contain an acknowledgement of MSNHA support. [*This project was supported through funding provided by the Muscle Shoals National Heritage Area*] If applicable, the acknowledgement must include the following statement: "*Any views, findings, conclusions or recommendations*

expressed in this [publication] [program] [exhibition] [website] do not necessarily represent those of the Muscle Shoals National Heritage Area”

7. CASH AND IN-KIND MATCH: Recipients are expected to make a valuable contribution in project expenses as stated in the approved project budget. They must also maintain auditable records of all project costs whether they are charged to awarded funds or supported by cost-sharing contributions.

All cash and in-kind contributions to a project that are provided by the recipient or by a third party are acceptable when they are:

- Verifiable from the recipient’s records
- Not included as contributions for any other program receiving federal funds
- Necessary and reasonable for the accomplishment of project objectives
- Not paid by the federal government under another award
- Used to support activities that are included in the approved project scope of work
- Incurred during the project period

For more detailed explanation contact MSNHA’s office.

8. PRE-AWARD COSTS: MSNHA does not approve or reimburse any costs incurred before the effective date of the addendum/modification agreement on any activity or task related to the approved project.

9. REPORTING REQUIREMENTS: Performance reports should be submitted to MSNHA as stated. Failure to submit reports on a timely basis may result in delayed reimbursed payments.

- Progress Reports relating to modified project activities are due as deemed necessary by MSNHA however, they will generally follow as such and begin on the approved date of requested modification:
 - a) 30-day extensions require no additional reporting
 - b) 3 month extensions require reporting due at the ninety 45 day mark
 - c) 6 month extensions require reporting due at the three month mark
 - d) 12 month extensions require reporting due at the six month mark
- Final Reports are due exactly thirty [30] days after MSNHA acknowledges receipt of a project’s completion, whether original or modified.
- Final Reports must include a final statement of cost, marked “FINAL”, incurred during the funded project. This statement of costs shall constitute a recipient’s final financial report.

10. RECORD RETENTION: Financial records, supporting documentation, and all other records important to the agreement should be retained by the sub-recipient for a period of three years from the submission date of the final report.

11. INTANGIBLE PROPERTY: The recipient may copyright any work that is subject to copyright and was developed, or for which ownership was purchased, under the award. Title to intangible property acquired under an award is vested upon acquisition and should be used for the originally authorized purpose.

- MSNHA has the right to:
 - a) Obtain, reproduce, publish or otherwise use the data first produced under an award; and authorize others to receive, reproduce, publish, or otherwise use such data for federal purposes.
 - b) Request research data from the recipient and have it provided within a reasonable amount of time so that it can be made available to the public through the procedures established under the Freedom of Information Act.

12. CERTIFICATION REGARDING DRUG-FREE WORKPLACE REQUIREMENTS: The undersigned [authorized official signing for the applicant organization] certifies that the applicant will, or will continue to, provide a drug-free workplace in accordance with 45 CFR Part 76.

All terms and conditions stated in the original Cooperative Agreement and previous Addendum(s) and/or Modification(s) will apply unless specified herein.

Project Title: *Tuscumbia Landing*

Addendum or Modification Information:

Effective Date:

Fiscal Year: FY2019

IN WITNESS HEREOF, the parties hereto have executed this Addendum/Modification on 14 day of _____, 2018:

MUSCLE SHOALS NATIONAL HERITAGE AREA

Carolyn Barske Crawford, Director

CITY OF SHEFFIELD, ALABAMA

Ian Sanford, Mayor

UNIVERSITY OF NORTH ALABAMA

Evan Thorton, Vice President for Business and Financial Affairs

OFFICE OF SPONSORED PROGRAMS, UNIVERSITY OF NORTH ALABAMA

Nathan Willingham, Director

City of Sheffield

Tuscumbia Landing Project

Tuscumbia Landing played an important role in shaping life in north Alabama in the nineteenth and twentieth centuries. The first railroad west of the Appalachian Mountains began in Tuscumbia. Many Creek and Cherokee Native Americans passed through Tuscumbia Landing during the forced removal of tribes in the 1830s. Union forces destroyed the landing during the Civil War and it was not rebuilt. In the twentieth century, the construction of the nitrate facilities during WWI brought activity back to the site. In the 1980s, the city of Sheffield turned Tuscumbia Landing into a park. The park, however, closed in the 1990s. In 2007, the National Park Service added Tuscumbia Landing to the national historic Trail of Tears and in 2011, NPS conducted a charrette to plan for the interpretation of the site. To begin with phase one of the project, which involves putting in walking trails, some interpretive signage, and altering the landscape, the City of Sheffield must conduct an archeological assessment and an environmental survey for the site.

Connection to MSNHA work plan:

Goal 3: Preserve and enhance the Heritage Area's numerous natural and cultural resources.

Goal 4: Serve as a catalyst for the development of outdoor recreational facilities and opportunities

Costs (proposals attached):

Office of Archeological Research, Archeological Assessment: \$10,875.00

AST Environmental, Environmental Survey: \$7,200.00

Total costs: \$18,075.00

MSNHA agrees to reimburse the city for half of the costs of the archeological assessment and the environmental survey: \$9037.50

The City of Sheffield agrees to provide the MSNHA with copies of the reports, copies of the signed contracts, invoices and cancelled checks upon completion of the project.

CREATE Architecture Associates, AIA

A R C H I T E C T U R E

218A North Court Street
Florence, AL 35630
ph. 256/383-9967 (fax 256/381-9789)

08 November, 2019

Mr. Steve Stanley, Councilman
City of Sheffield, AL
600 North Montgomery Avenue
Sheffield, Alabama 35660

re: **Tuscumbia Landing – Restroom and Parking Facility – COST ESTIMATE**

Mr. Stanley:

Thank you for the opportunity to be involved in the good work and vision for Tuscumbia Landing. I would love to see this project move forward, so I hope this cost estimate helps in your efforts.

- **RESTROOM FACILITY**

- 2 single user fully accessible restrooms (1 male/1 female)
- Prefinished split-face concrete block exterior walls
- Wood-framed roofing
- Standing seam metal roofing
- Heating and ventilation only

131 gross square feet x \$150*/square foot = **\$19,650**

*This square foot cost is significantly less than what current commercial costs would allow, and therefore, would require volunteer or donated materials or labor in order to be achieved.

- **PARKING LOT**

- Approximately 82 standard parking spaces (9'-0" wide x 20'-0" deep), plus 4 fully accessible spaces and associated passenger loading zones
- 6" crushed gravel base plus 2" asphalt paving
- Standard painted striping
- No associated concrete walks included

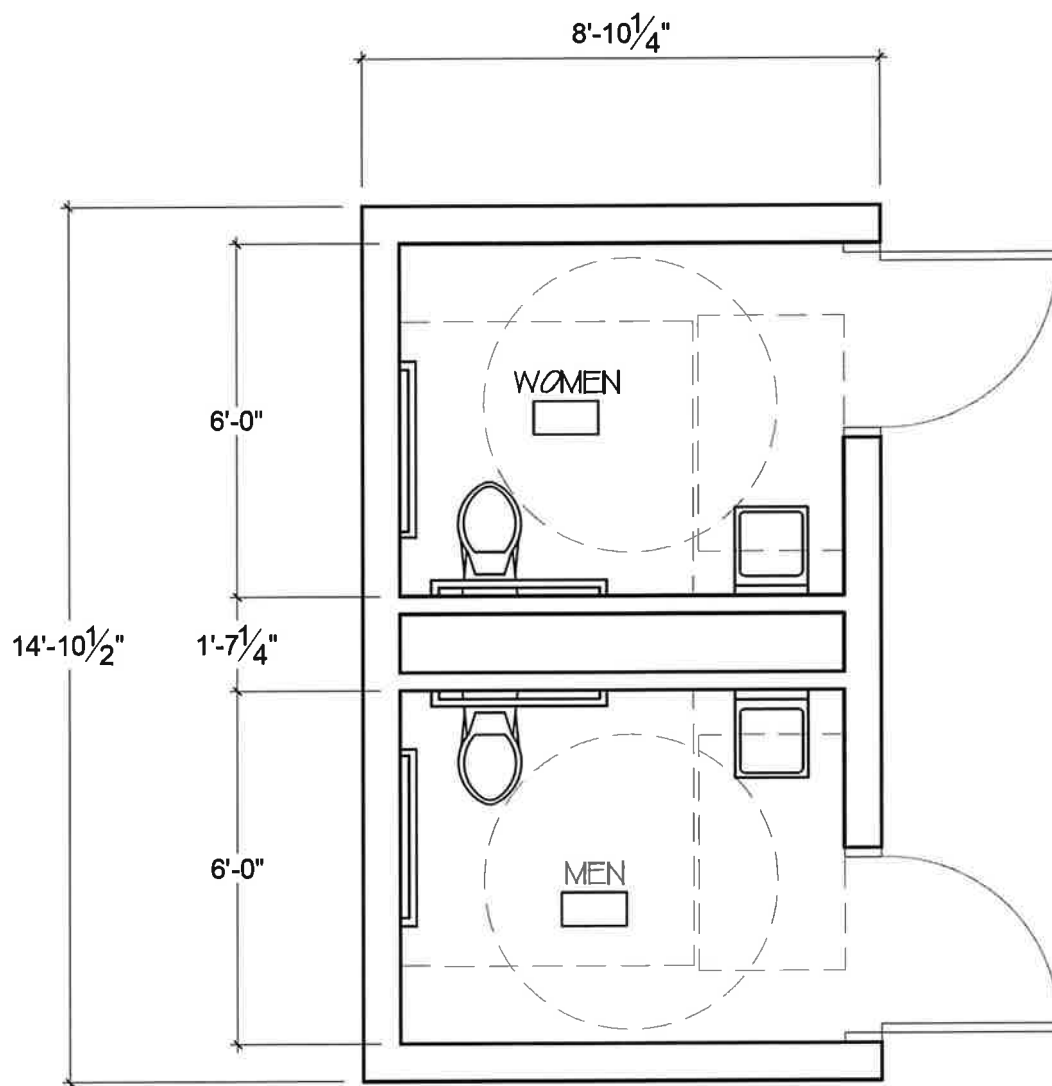
24,192 gross square feet x \$5/square foot = **\$120,960**

Feel free to call or email with any questions you may have, and thank you again for the opportunity.

Sincerely,



Brad Bernard, AIA



November 9, 2018

Mayor Ian Sanford, City of Sheffield
Steve Stanley, Chair of the Sheffield Redevelopment Authority

City of Sheffield
PO Box 380
Sheffield, Alabama 35660

Re: Archaeological Assessment of the Proposed Tuscumbia Landing Trail System Colbert County, Alabama

Dear Mayor Sanford and Chairman Stanley,

The University of Alabama Museums, Office of Archaeological Research (OAR) is pleased to submit this research design and cost estimate for the proposed an archaeological assessment of the proposed trail system at Tuscumbia Landing in Colbert County, Alabama. Included in this proposal package are a Statement of Work, Work Schedule, Budget, and Project Information Request Form. The Statement of Work, found in Attachment I, contains a description of the work to be done by The University of Alabama Office of Archaeological Research, as well as additional information relevant to this project. The Work Schedule, found in Attachment II, displays the estimated timetable for completing the work as outlined in Attachment I. The Budget, found in Attachment III, contains an itemized estimation of costs as it relates to the Statement of Work.

The University of Alabama, Office of Archaeological Research looks forward to applying its expertise and experience to this project. In the instance of acceptance, please forward notification to Matt Gage to initiate the Contract process. The University of Alabama will promptly provide a Contract for execution upon a notice of acceptance.

If you have any questions or comments about the proposal package, please do not hesitate to contact the Office of Archaeological Research. Thank you for your consideration.

Sincerely,



Matthew Gage RPA
Director
Office of Archaeological Research
The University of Alabama

ATTACHMENT I

Statement of Work

Project Information

Project Title: Archaeological Assessment of the Proposed Tuscumbia Landing Trail System Colbert County, Alabama

Sponsoring Company/Agency: City of Sheffield, Alabama

Point of Contact Info: Mayor Ian Sanford and Chair Steve Stanley/ Matt Gage

Principal Investigator: Matt Gage

Description of Work

The University of Alabama Museums, Office of Archaeological Research (OAR) is pleased to submit this research design and cost estimate for an archaeological assessment of the proposed trail system for the Tuscumbia Landing park in Colbert County, Alabama (Figure 1). All phases of the research will be conducted in compliance with the guidelines set forth by the Department of the Interior and the Alabama Historical Commission (AHC) for Section 106 of the National Historic Preservation Act (NHPA) of 1966 as amended 2006 (16 USC 470) and its implementing regulations (36 CFR 800). It is understood that the proposed undertaking is being funded with federal dollars. As such accounting will follow Office of Management and Budget Uniform Guidance (2 CFR, Part 200). Included with this research design is an itemized estimation of costs as it relates to the Statement of Work. The budget has been prepared in reliance upon the information provided by your organization.

The archaeological assessment will address archaeological sites within the proposed trail system area of potential effect (APE). Prior to field investigations, the National Register of Historic Places (NRHP) and the Alabama State Site File will be searched for historic properties, previously recorded sites, and previously conducted cultural resources surveys conducted within the area. Numerous previously recorded sites, including Site 1Ct292, the remains of Tuscumbia Landing, lie within the APE. Any potential effect to this site or newly recorded sites will be addressed during the course of field investigations.

In order to identify and evaluate the APE as well as the disposition of any historic properties that may be affected by the proposed undertaking, the following methodology will be employed:

- (1) Shovel testing of all areas within the APE that exhibit less than 15 percent slope and less than 30 percent surface visibility. Shovel tests (30 cm diameter) will be excavated at 30 m intervals to a depth of 70 cm or until subsoil is encountered. In those areas with greater slope, shovel tests will be excavated at a maximum of 60 m. All excavated soils will be screened through 6.35 mm (0.25 inch) hardware cloth, and artifacts recovered shall be bagged and labeled by provenience;
- (2) Portions of the survey area lie within the floodplain of Spring Creek. These areas may exhibit the potential for deeply buried cultural deposits. In such areas shovel testing will be augmented with hand augering to depths of up to 2 m. Again, all excavated soils will be screened through 6.35 mm (0.25 inch) hardware cloth, and artifacts recovered shall be bagged and labeled by provenience;
- (3) Should an archaeological site be identified shovel tests will be conducted at 15 m intervals until two negative shovel tests are excavated in an effort to delineate the site boundaries. All deposits will be screened through 6.35 mm hardware cloth. Artifacts recovered in the screen will be bagged and labeled by provenience.
- (4) A leaf blower will be employed to aid in surface visibility. The intent is to reveal artifacts and surface expressions of cultural features hidden by leaf litter and detritus. Exposed features and uncollected artifacts (should any remain) will be recovered following their exposure.
- (5) Recommendations of NRHP eligibility or ineligibility for all cultural resources identified during the Phase I cultural resources survey will be made in accordance with the criteria in 36 CFR 60.4. The findings of this analysis will be included in the survey results section of the cultural resources report. Summary recommendations concerning project impact on any resource recommended eligible will be offered in the concluding chapter of the report (discussed below).

Upon completion of the fieldwork, should an archaeological site/sites be identified, OAR will generate site forms to be submitted to the Alabama State Site File.

Within one week of completion of fieldwork, OAR will submit a Management Summary that outlines the horizontal and vertical extent of archaeological sites within the APE, as well as OAR's recommendations as to the NRHP eligibility status. It will also provide the disposition and NRHP eligibility recommendations for any historic architectural resources.

Fieldwork will begin within 15 working days of a notice to proceed, with the work being completed within two weeks of the start date. A Management Summary shall be submitted as discussed above within one week of completion of the fieldwork, with a final draft report submitted within three weeks of completing the field survey.

In the event human remains are encountered, OAR will follow protocol as per state law. All ground disturbing activities shall immediately cease in the vicinity of any human remains, and the Alabama State Archaeologist, and the Colbert County Coroner will be immediately notified. Any human remains shall be treated in accordance with all Federal and State laws concerning archaeological sites and treatment of human remains.

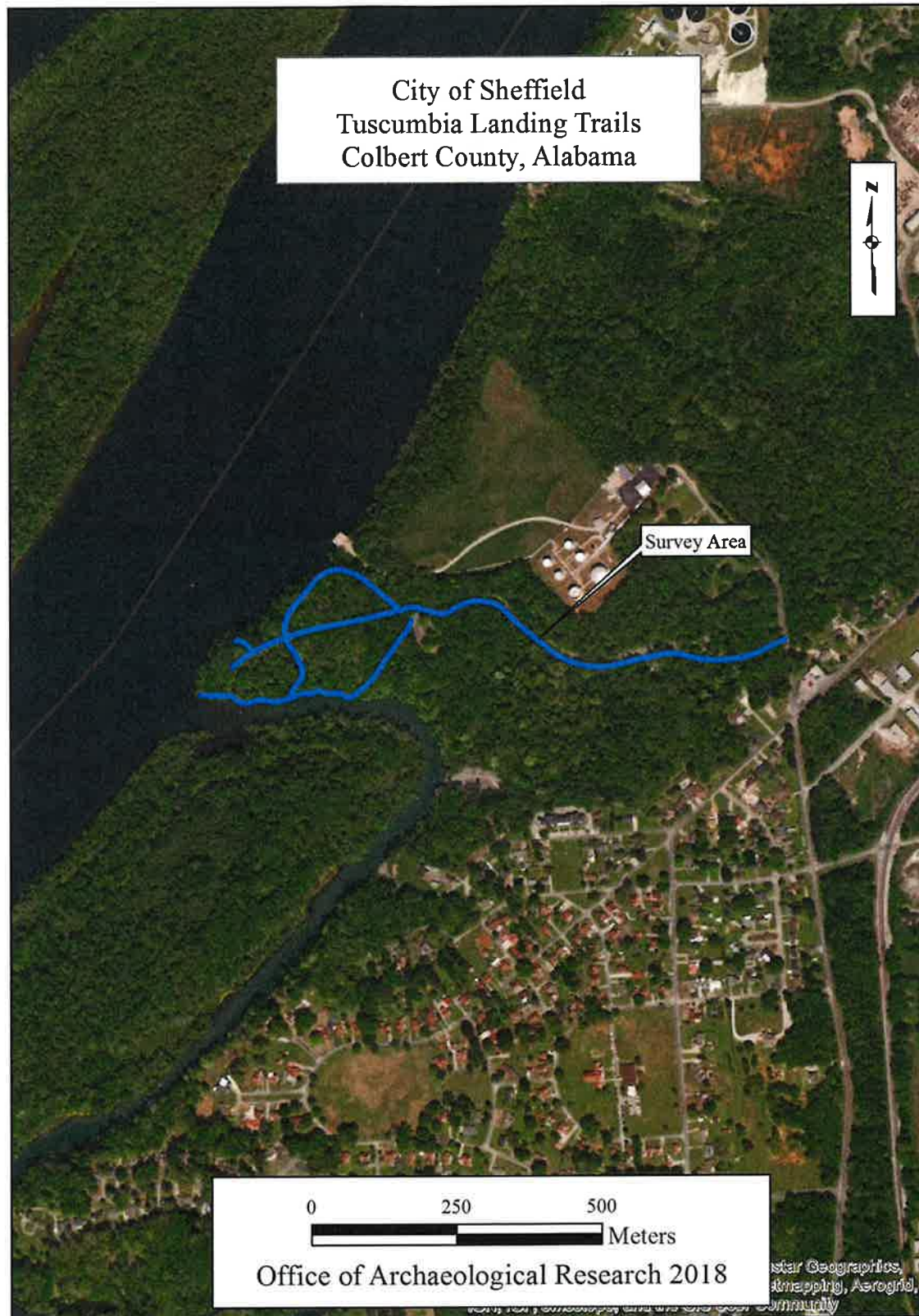


Figure 1. Survey area (APE) for the proposed Tuscumbia Landing trail system.

Except for human remains and associated funerary objects, all cultural materials recovered during the project will be transported to the David L. DeJarnette Archaeological Laboratory at Moundville Archaeological Park in Moundville, Alabama for processing and analysis. Laboratory analysis will follow accepted standard procedures involving washing all recovered materials, sorting by class and category, and tabulation of all artifacts. During the analysis process, artifacts will be placed into archival bags with provenience information and prepared for permanent curation. Information on all recovered artifacts and their proveniences will be entered into the OAR Artifact Database. Upon completion, all artifacts, photographs, field notes, maps, and documentation pertinent to the survey will be curated at the Erskine Ramsay Archaeological Repository located at Moundville Archaeological Park. This repository meets Department of the Interior Curation standards as defined under 36 CFR Part 79 and required by Chapter 460-x-9 of the Administrative Code of Alabama.

Deliverables

OAR will prepare a report that meets accepted professional standards, and incorporates the initial research design, discussion of field and laboratory methodologies, a description of the area surveyed, as well as any field conditions encountered that affected or modified the initial research. Photographs and diagrams of representative shovel and auger tests and a table of their description will be included. The report will also include a statement regarding the research potential of additional investigations and significance from archaeological and architectural historical perspectives. OAR will submit a digital (PDF) copy of the draft report for review and comment. Once you and/or the lead federal agency have supplied comments, three bound copies and ten digital copies (PDF) will be submitted on CD/DVD for review and comment. After receipt of comments, a final report incorporating appropriate changes, OAR will incorporate the requested changes and submit four bound copies and up to ten digital copies of the final report. The final report will conform to professional standards and the guidelines set forth by the AHC and Department of the Interior. OAR will provide complete copies of archaeological site survey forms with permanent state site numbers for each site identified during the survey and complete copies of historic structure inventory forms with permanent inventory numbers for each structure identified during the historic structure inventory. These forms will be included as an appendix to the final report

Other deliverables will include project shapefiles, using Alabama State Plane coordinates and projected to NAD1983. The shapefile data and associated maps will depict survey coverage (both shovel test locations and pedestrian reconnaissance). If applicable, site locations and areas that exhibit the potential for buried deposits will also be included. This report must be submitted to and approved by the lead Agency in accordance with Section 106 of the NHPA.

Schedule of Work

ATTACHMENT II

Background Research/Field Work	10 days
Laboratory Analysis and Report Production	3 weeks
TOTAL ESTIMATED TIME	5 weeks

The official Period of Performance for this project will be established by final binding Contract. Authorization or notice to proceed dates must fall within the Period of Performance as stated in the Contract.

Cost Proposal		
Archaeological Assessment of the Proposed Trail System at		
Tuscumbia Landing in Colbert County, Alabama		
Salaries & Wages		\$4,652.19
Benefits		\$1,628.26
	Subtotal Salaries, Wages, Benefits	\$6,280.45
Travel & Per Diem		\$2,068.00
Operating (GPR Equipment, Supplies, etc.)		\$180.00
Curation		\$102.50
	Subtotal Operating Expense	\$2,350.50
F&A (@ 26% MTDC)		\$2,244.05
	Total Estimated Cost	\$10,875.00



9.12.2022

To whom it may concern:

I'm writing this letter today in support of the City of Sheffield's application for the Recreational Trail Program grant for Tuscumbia Landing.

The Tuscumbia Landing site has long been a priority site for interpretation of the Trail of Tears, the history of the Tennessee River and the economic development of the Shoals Region. As a site on the National Trail of Tears, Tuscumbia Landing played an important role in the removal of Native Americans out of the southeast. As an important piece in the TC&D Railroad, the site was instrumental in the growth of the cotton economy of the region. It also became an important location in the development of the Shoals region during WWI, as the federal government invested resources into the construction of nitrate facilities and the Wilson Dam. Facilitating access to the site so that these stories can be shared is of utmost importance.

The implementation of plan designed by Alta Planning and the Kelley Group and funded through the National Park Service is the first step in making the site a destination for visitors. It is a well thought out plan that takes into account the needs of a diverse group of visitors and recreational users.

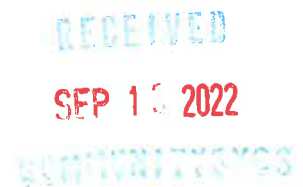
Thank you for your consideration of the proposal for Tuscumbia Landing.

Best,

A handwritten signature in black ink, appearing to be "CB" followed by a stylized flourish.

Carolyn Barske Crawford, Ph.D.

Director, Muscle Shoals National Heritage Area





DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NASHVILLE DISTRICT
WESTERN REGULATORY FIELD OFFICE
2424 DANVILLE ROAD SW
SUITE N
DECATUR AL 35603

March 26, 2021

RECEIVED
SEP 14 2022
CLINTON 37034

SUBJECT: File No. LRN-2021-00281; City of Sheffield ADECA Recreational Trails Program, Tennessee River Mile 252.2 Left Bank, Colbert County, Alabama.

Beau Cooper
NACOLG
P.O. Box 2603
Muscle Shoals, Alabama 35662

Dear Beau Cooper:

This is in response to your Feb 15, 2021, request for our comments regarding the subject project.

The U.S. Army Corps of Engineers (USACE) has regulatory responsibilities pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344). Under Section 10, the USACE regulates all work in, or affecting, navigable waters of the U.S. Under Section 404, the USACE regulates the discharge of dredged and/or fill material into waters of the U.S. (33 CFR Part 328).

A review of the information provided indicates the subject activity may involve work in wetlands/waters of the U.S.; therefore, a Department of the Army permit may be required.

We understand the project proposal may not have specific design plans at this time, and this inquiry is an initial review to obtain grant funds. We have no objections to the applicant receiving grant funds for the proposal.

If you have questions regarding this matter, please contact Eric Sinclair at the above address or telephone (256) 350-5620. Thank you for the opportunity to review and comment on this proposed project.

Sincerely,

William E Sinclair
Regulatory Project Manager
Regulatory Division
U.S. Army Corps of Engineers

NACOLG

Northwest Alabama Council of Local Governments
P.O. Box 2603 Muscle Shoals, Alabama 35662

RECEIVED

SEP 14 2022

COMMUNICATIONS

Kelth Jones
Executive Director
kjones@nacolg.org

256-389-0500
256-389-0599 Fax

Bobby Page
Chairman

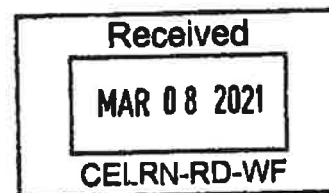
Sandra Burroughs
Vice Chairman

Kerry Underwood
Secretary

February 15th, 2021

Mr. David Monroe
Corps of Engineers
2014 Beltline Road S.W.
Building C Suite 415
Decatur, AL 35601

City of Sheffield (Colbert County)
ADECA-RTP



Dear Mr. Monroe:

The City of Sheffield is seeking ADECA Recreational Trails Program funding to construct a walking trail at the Tuscumbia Landing National Historic Site. The proposed project map is attached. All construction will be on previously disturbed property on an existing foot trail which has already undergone and passed a previous environmental review. The proposed project is located a lat/lon of 34° 44' 55.3056"N/87° 43' 34.464"W.

During construction, "Best Management Practices" will be used to prevent siltation and sedimentation. As required by ADECA, we are requesting that your office review our proposal for preliminary environmental concurrence.

Please note attached map, and photographs. Thank you for your assistance with this project.

Sincerely,

Beau Cooper
Regional Planner
NACOLG

NORTH ALABAMA

ALABAMA MOUNTAIN LAKES TOURIST ASSOCIATION

www.northalabama.org

RECEIVED

SEP 15 2022

COMMUNITY STOS

September 14, 2022

Ms. La'Toya Edwards
Recreation and Conservation Program Specialist
Alabama Department of Economic and Community Affairs
401 Adams Avenue
Montgomery, AL 36104

RE: RTP Application-Trail of Tears National Historic Trail at Tuscumbia Landing

Dear Ms. Edwards:

I am pleased to write this letter to express my support to the City of Sheffield in their efforts to acquire a Recreational Trails Program grant for the Trail of Tears National Historic Trail at Tuscumbia Landing.

Tourism is an economic powerhouse in North Alabama. In 2021, travelers spent over \$3.7 billion while visiting the 16 counties of the North Alabama region, representing a 42.8% increase over 2020. The North Alabama tourism industry suffered from the pandemic in 2020, as travel came to a halt as the spread of COVID-19 infiltrated our nation. As we navigated the fluid situation of the pandemic, we soon realized a substantial increase in outdoor recreation with more people expressing an interest in spending time outdoors and turning to nature for its health benefits. The region is lacking in greenway trails and bicycle and pedestrian facilities and the Trail of Tears National Historic Trail would be a welcome addition for local residents and visitors to the region.

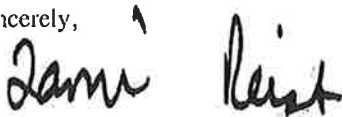
One of the largest motorcycle rides comes through north Alabama each year to honor Native American Indians that once traveled through the region. The Trail of Tears Commemorative Motorcycle Ride takes place in September each year and routinely attracts upwards of 15,000 motorcyclists, providing an economic boost to numerous cities and communities across the region. During the annual event, visitors to the area explore area restaurants, purchase gas in local convenience stores, and shop in retail stores. According to event organizers, the event has generated approximately a \$35 million economic impact on the North Alabama region by money spent on lodging, gas and food.

The town of Tuscumbia's Oka Kapassa, The Return to Coldwater Festival is also held in September and attracts thousands of visitors and school groups to the community each year. A gathering of representatives of Native American Tribes, the festival celebrates the kindness shown to them by the citizens of Tuscumbia during the Indian Removal. It has been recognized as one of the top events in the southeast by the Southeast Tourism Society.

Because of the strong music heritage of the Shoals, Native American heritage and outdoor recreation in the surrounding area, the local government and school system recognize tourism and travel as an industry that significantly contributes to the county's revenue, economic growth and employment. In 2021, lodging tax revenue was over \$500K and travel-related expenditures in Colbert County reached \$101.5 million, a 41% increase from 2020. This shows tourism is a huge economic driving force in Colbert County that continues to grow each year.

Thank you for your consideration. I hope that the highest consideration will be given to the City of Sheffield for a grant. If I can be of further assistance, please contact me at 256.350.3500.

Sincerely,



Tami Reist
President & CEO